The Mining Journal,

AILWAY AND COMMERCIAL GAZETTE

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

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Original Correspondence.

MINES ASSESSMENT BILL.

SIR,—In my last letter I suggested that the rent or royalties for the purpose of this Act should be made up for the true year to end at Christmas, instead of as now proposed in the Act to end October 1, and that the rent or royalty paid to the lord during the twelve months should be the basis for the gross estimated value for the Poor Law year, commencing March 26, when the new overseers come into office. The next question to be considered is how will the 4th, or clause A, in the Bill bear upon the rateable value to represent the loss of the corpus or fee simple in the land taken away or destroyed?

Great care should be taken in examining and deciding this question, as *on it* hangs the future working of this Bill, whether it will lead to peace or war, in the shape of litigation, with the parish authorities, as they will be the litigants, and will try and take advantage of any flaws in the Bill; for the miners should bear this in mind, the overseers are generally farmers and not miners, and, as a body, no friends to the miners, who cut up their land and walk over and trample down their fields in going to and from their work, and, therefore, will put the screw on where they can; therefore, this clause should be simplified as much as possible, and written out in the plainest and most intelligible language that can be used, after the principle is decided upon.

The 4th, or clause A, refers to the allowance to be made for the exhaustion of the corpus; is it to be clearly understood that this reduction in the value of the corpus is the foundation for the reduction from the gross estimated value to the rateable value, or to form a new gross, from which the deduction is to be made for the rateable value. In either case, what percentage would meet the case?

I find two of the Unions in this county have adopted the principle in the allowance to be made in the reduction from the gross to the estimated value on mills at 40 per cent. If such a reduction can be made on water corn-grinding mills, where the expenses of repairs, &c., attending them are about proportionate with the water or steam ore-crushing or grinding mills on the mines—query, would that percentage be equivalent to the exhaustion of the corpus in the mine? This question should not be left to the overseers, or even the Assessment Committee, to be decided, but should be embodied in the Bill, which would settle the question throughout the kingdom.

J. G. WILLIAMS.

BLASTING—GUNPOWDER SUPERSEDED.

SIR,—How painful it is to read so repeatedly in the newspapers of accidents to miners from the use of iron tamping bars, when those with copper tips can be so easily procured. Mining agents ought to enforce the use of the latter in all mines, and wherever quarrying is carried on. We all know how careless and heedless workmen become in the face of constant danger. Agents should, therefore, be made in some way responsible for the safety of their men.

But why should we be so tied to the old-fashioned way of blasting with gunpowder, when other means, more expeditious, more economical, and free from danger, are known? There are cartridges made, composed of certain ingredients, which possess quite as much, if not more, explosive power than gunpowder, and which do not in any way require tamping, but simply allowed to drop into the hole prepared in the rock to receive it, and the fuse attached to it ignited in the usual way. They explode as easily under water as in a dry place when lit, and, from what I have seen, produce greater results than nearly double the amount of powder does. I cannot conceive why they are not more used, particularly when both safety and economy are thereby acquired.

I, for one, would gladly use my efforts with the inventors, or patentees, &c., to bring them into more general use, and at as cheap a rate as possible, so as to put a stop to these too frequent sacrifices of life. With this object in view, may I beg, Mr. Editor, your kindly inserting these few lines in your valuable Journal, convinced as I am of the practical results to be obtained from the perusal of them.

Woodlands, Isleworth, July 22. J. W. L.

CONSTRUCTION OF PUDDLING FURNACES—No. II.

SIR,—In continuation of my remarks respecting both the use and abuse of oxygen in connection with puddling, or rather the erection of puddling furnaces, I may state that it appears strange to the practical and competent ironworker that this very useful and necessary element in the perfection of the malleabilising process should not ere this have been properly defined, and its nature so far explained that all may know both its power and the limits of its use,—how far, in fact, it can be made applicable and useful in a free state, passing over the molten charge of iron, towards developing the same. I shall not follow the track of many who have already given us their versions respecting the matter by quoting the opinions and definitions of nearly all the authors in Christendom, but shall content myself (this time, at least) with the small amount of knowledge which has practically developed itself, by following up the practical part of the operation; for it is evident that many of these writers upon puddling know no more about the practical part of the operation than does the man in the moon; hence they cannot be relied upon, the more especially as they disagree so much from each other.

As a proof of what might be gained by not allowing the oxygen to escape too rapidly with the column of gases as it enters into composition with them, and its utility in preserving both quantity and quality, I may mention that for a number of years I worked at one and the same furnace, and I always remarked that when the roof had a certain elevation over the grate it deprived me of the use of nearly all the free oxygen that would enter the flame, as the space over the fire-chamber was too confined; consequently, as the fresh gases continue to spring from the fuel they at once forced their way to the stack, and were lost as a decarbonising agent; indeed, it travelled at lightning speed, the confined space over the fire-chamber so militating against the essential reverberatory action of the flame, that I found it practically impossible to produce either quality or quantity. Whatever amount of labour and attention might be bestowed upon the charge, it would still remain in the same raw state, and it was with the utmost difficulty that it could be made to either shingle or roll. Of course, I am speaking of the iron ordinarily produced in South Wales for all purposes. As regards quantity, I had frequently to sacrifice from 60 to 80 lbs. of the charge in giving it the required change. Nor did the evil end here, for invariably the oxygen that should have been consumed in the body of the furnace had, I found, been consumed in the flue. The heat at this place, in consequence of the consumption of such a quantity of this fiery element, was so intense as to melt the whole of the brickwork, including the reverberatory sides, and probably five or six courses of the roof. The whole of this brickwork had to be renewed every alternate week. Again, this melting of the brickwork so gobbed my furnace as to completely fill the draught way, and that, sometimes, before half the week had expired. Indeed, I could go a great length respecting these evils, and would only ask any conversant person to calculate the effects of them upon both master and man, and compare their conclusions with those of the theoretical doctors who are spinning their learned disquisitions on subjects they evidently know but very little about. Then, as regards quantity, the time occupied in completing each charge was over the time contemplated, as puddlers are at most works required to complete the working of seven separate charges in 12 hours. The time thus allotted to each would be 1 hour 37 minutes, so that any charge occupying more than that time would involve the loss of a charge in 12 hours, as is frequently the case at many works.

I have already observed how the telegraphic speed of the oxygen over the crude iron affects both quantity and quality, and the loss of this element to both master and puddler, under the circumstances named, may be thus set down. We will take one forge as our guide, containing 15 puddling furnaces, the whole built on nearly the same principle as Mr. Menelaus' churning machine. In the first place, the puddler loses quantity—at least 30 lbs. per charge; and allowing the rate to be six charges per turn, it would be equal to 1½ cwt. per furnace, consequently, as this forge contains 15 furnaces, the loss (their working full time) would be 11 tons per week, and each furnace would waste 16 cwts. 2 qrs. Of course, this is iron hopelessly lost to all. Again, the loss of time on non-production might be set down at 4 tons for each furnace per week, and at this computation the yearly loss to all concerned can be readily judged of. Leaving quality, bricks, &c., out of the question, as we cannot ascertain how far the deterioration of the material can really affect us, not only as workmen and masters, but in a commercial point of view, who can estimate the damage we have sustained in the commercial world by not paying proper attention to the action and results of this spontaneous and gratuitous element? Our employers daily complain respecting the effects of competition, and that our trade is fast leaving us, but is it to be wondered at whilst we are continually palming off on our best customers a rotten and worthless article, though by properly attending to the development of one single element we could manufacture a much superior and more trustworthy article, so that instead of Wales being a by-word and a reproach for the slovenly and barbarous way in which we conduct our operations, we might become the most skilled and artistic. The building of the furnaces, as I have fairly shown, is the disgrace and curse of our country, and the cause of the flower of our operatives having fled from the land of their birth; yet these operations have of late years increased rather than diminished.

Now, I would ask how much longer is one of the most important branches in connection with the manufacture of iron to be left in this uncertain condition? How does it happen that the very branch that must decide both the quantity and quality of all wrought-irons has had so little attention paid to it, whilst human ingenuity has developed so many elaborate designs, both mechanical and chemical, connected with other subjects? We can trace a star to the remotest boundaries of our planetary system, and calculate its distance or describe its elevation; we can command the electricity to carry our thoughts and sentiments to all parts of the globe; we can travel the trackless ocean from pole to pole, and traverse the vast deserts of Africa to the source of the mighty Nile, directed only by a simple process; but, notwithstanding all that has been accomplished and discovered in the scientific and mechanical world, coupled with the various uses and adaptations of iron which have of late been made, we are still in a very uncertain and unreliable position respecting the action and results of one simple element. It reflects but little credit on those who by their genius and ingenuity have brought iron to answer so many useful and trustworthy purposes to leave in this dilemma the ironworker, whose daily toil is physically beyond endurance, simply from the want of knowledge of those elements which would act in conjunction with other elements to form the material intended to be amalgamated with the iron by the chemical changes which take place, and the labour the ironworker is required to perform upon it. But a great deal more fault could be found by those who have largely invested their capital in ironmaking, that such vile and barbarous practices should still exist in our forges and mills. Machinery is now introduced into agricultural pursuits, and chemistry has long since elucidated the most suitable soils for different plants, so that we find art and science making all plain, intelligible, and simple to all conditions of men except the poor ironworker.

July 22. PUDDLER.

NEW FUEL—UTILISATION OF SMALL COAL.

SIR,—Observing some remarks on my New Fuel in last week's Journal, I am induced to offer a few particulars, which may be of advantage to persons who feel an interest therein. My plan does not require machinery, which all others plans do, thereby involving great expenses before any return can be realised; indeed, mine is ready in a week, without any charge except for manual labour, (say) 3s. per ton. It can be made in open fields like bricks, moulded into any shape, and suitable for the required fires. The coal is improved, as the endurance of heat is increased 10 per cent. For many purposes a suitable fuel can be made, which cannot be obtained in natural coal with the same effect; in fact, all the results are not yet discovered; a great improvement can be made for gas, and, no doubt, many other purposes. Looking, then, at the immense amount of small coal lying waste, is it not the duty and interest of all proprietors to try what can be done when the prize is so easily obtained? I leave this to their good sense.

Cranmer-road, North Brixton, July 24. JOHN ROBERTS.

P.S.—I have forwarded a sample to your office, for the inspection of those interested, which was made on the 19th inst. J. R.

THE SLATE TRADE IN NORTH WALES—No. I.

SIR,—I am sure you will be pleased to learn that the slate trade in North Wales shows unmistakable signs of more than usual activity. Doubtless many of your readers will be much gratified to know that the past few months have been characterised by a growing interest in favour of this class of investment. The Principality well deserves the increased attention of investors, especially in regard to this great commercial commodity. It is quite true that the slate trade in some instances has not in the past fulfilled the expectations of parties who have freely supplied the funds recommended for its development. It is also true that in some cases capital has been used unsparingly, in order to test the merits of certain properties, before finally regarding their efforts a failure. There are also instances where sufficient funds have not been forthcoming to ensure success, in consequence of the first representations proving inadequate to demonstrate the correctness of the estimate originally contemplated. This latter class ought not to be considered *failures*, although there are several of them, and which shall be more fully considered hereafter. I would, however, take this opportunity to remark that some of the so-called "failures" would, under efficient supervision, have become permanently profitable undertakings. "The efficient supervision" referred to shall be considered in another article. The most surprising part of the problem is, that men the best able to elucidate this great theme should be so silent upon the subject. It is to be regretted that a want of pluck should exist on the part of quarry operatives in defending the trade, and exposing the machinations of those who make it a business (regardless of principle) to float unworthy speculations. We cannot shut our eyes to the fact that such reckless and unpardonable conduct must rebound most disastrously to the great detriment of the trade. Some conflicting circumstances prevent practical men from coming into print, with a view to warn the unwary at an early day against this sophisticated fraud. Should they condemn openly the great waste so unsparingly lavished on worthless (so-called) slate properties, they might as well leave the land of their birth, as some direct or indirect means would be employed to deprive them of their situations. But, suppose they should to the best of their ability (being uneducated) ventilate this great subject, and endeavour to put capitalists on the right track, thereby doing homage to the trade, and shielding the interests of the operatives, would their communications pass without being sarcastically criticised by the wounded party? I leave you to judge. Would not advantage be taken of some technical question, perhaps not aptly defined in accordance with the general laws and principles of science, taking care to palm off his theories as patent and digestible food? The plodder being learned in the intricate definitions of diction and phraseology, and being feathered in all the plumage of language, could easily construe the simplicity and truthfulness of the artizan into mockery and ridicule. What is the sequel? This show of logic, so ingeniously concocted for the occasion, impresses some so convincingly (though it be to their hurt), that they are led to decide in favour of the advances of this "liar in wait to deceive."

From the many letters which I have received from quarry proprietors during the last six months, I infer that at no distant day a more complete system of supervision will gradually be adopted, such as shall greatly improve the interests of sound undertakings, and at the same time act most successfully against the promotion of defective and untenable speculations. One unacquainted with the product (slate) might, on consulting the records showing the rate of manufacture during the last ten years, reasonably infer that in a few years this deposit would become exhausted. But those whose province it is to be better acquainted with the subject know that hundreds of years hence will prove that the celebrated Bangor and Festiniog bearing ranges *alone* will only then disclose the great reserve in store to meet the increasing wants of future ages. The largest of the quarries on the before-named ranges of slate rock has only had converted a hundredth part of its outcrop; therefore, as all slate veins, as a rule, greatly improve in depth, the past workings and the past profits are small when compared with the results obtainable from more extensive operations. It is quite true that much time and expense often precedes, beyond the time computed, the dividends so bewitchingly referred to upon embarking on the work of development; still there may be a good reason for this difference, if not there should be. Before closing this letter, I venture to assert that all who are possessed of legitimate slate properties (whether they are working them or not) will before long find a market and a proprietary that will soon turn to good account an article commanding such ready sale at a standard of commercial value.

Tremadoc, July 23. JOSEPH KELLOW.

THE PROGRESS OF MINING—AS A SCIENCE, AND SOURCE OF COMMERCIAL WEALTH.—No. VII.

SIR,—In order that any enterprise should hold a successful career, it is necessary that it should have a good start. There was much to be complained of in the old system of forming mining companies, and, perhaps, the principle that held a man to be a shareholder after he had discontinued to pay his calls, and his fellow-shareholders afterwards contributed the money to pay the cost, knowing that the defaulting adventurer might claim to be entitled to his full share of the profits, was the most inequitable of the principles governing old mining operations; at the same time there is something to be said on the other side. Suppose, for example, the defaulting shareholder had gone on to pay a large bulk of the whole cost during his prosperity, and ceased to do so through suddenly falling into adversity, the old rules sought ruthlessly to forfeit all his interest, taking advantage, at the same time, to confiscate all the money he had paid, for the sole benefit of his brother shareholders. It has been held in equity that there is no power of forfeiture on the part of his fellow-shareholders; but whether that be so or not, it appears to me that it would be better to make some equitable provision for a shareholder, that he should receive some profit in proportion to the capital he had invested, than that he should be deprived of all benefit accruing from his investment. Notwithstanding modern legislation has by means of limited liability introduced into mining adventure the elements of equity, I must confess that, on the whole, under the old Cost-book Principle I have seen better management by means of a constant co-

operation on the part of the company, and full confidence in one good manager, than I have through the operation of large boards of directors and a complicated management. In the olden days, when some person discovered the surface indications of a good mine, he made known his luck to his friends, who inspected the lode, and, if the symptoms were very favourable, it was generally a matter of difficulty to obtain shares, which went to a premium on the instant. These shareholders being friends and neighbours, knowing the whole circumstances of the mine, and that all the facts were before them, usually selected a good practical mining agent to conduct their affairs, and worked together with great and cheerful unanimity.

In this way many of the great Cornish mines were brought to the acme of success, and often without much cause for complaint as to repayment of cost. It is very different now: I have seen many a good mine, with a great list of directors, introduced to the world with a flourish of trumpets, and I have in several instances shortly afterwards seen such mines stopped at (say) 20 fms. under the adit, with good courses of ore in sight, that would positively leave a profit on the working. Any system in which such a result as this can occur must be radically wrong, no matter what equity enters into its rules, or what wisdom conducts the working operations: there must be vital error in the form of association, or the governing element. We have been from time to time looking at the introduction of skilful inventions, and the removal of impediments touching mines themselves, but here we have matters entirely foreign to the mines. The seed of these calamities has been sown by the promoters in London or elsewhere, not in the mining districts, which have nothing to answer for with respect to these unfortunate catastrophies; but disasters that can lead to the breaking up of a vigorous young mine, just landed into a state of prosperity, are far more dangerous to the great course of mining, taken as a whole, than most of the incidents of evil connected with practical mining. There is another fatal and wicked policy connected with the conduct of mines, of more fell consequence than any mischief originating in either the legal or the mining mind: this infamous contrivance emanates from the brain of the broker, and consists of a project by means of which a party of gentlemen, having laid out their money to discover and establish a good mine, have it sold over their heads, at a low price, by some clever and intrepid adventurer; through this process the proprietors suddenly have it brought to their minds that their property is worth nothing, notwithstanding it is making good dividends. All the realities of prosperity to them are made to appear mere fiction, for if they feel inclined they can buy their own shares, to be delivered to them six months hence, perhaps, at half their real value. People will say—Nonsense, such a system as this must fall to the ground, it cannot stand; but it is only meant to stand long enough to destroy confidence, and we have too much experience of its baneful influence to deny its existence, or the great injury recently come to mining through its perfidious influence. Mining is thus like a stately tree, encumbered by woodbinds and parasites; its energies are cramped, and its existence put under contribution, in order to support worthless hangers-on; lop off these, and it would thrive luxuriantly.

M. F.

DRAKE WALLS AND WEST DRAKE WALLS MINES, AND THEIR MANAGEMENT.

SIR,—As long back as February I find that Mr. Nicholas Ennor, in referring to these mines, stated—first, that as far as Drake Walls was concerned, "it would have paid well if crushers had been put up in an early day, in the place of stamps, *which shows it had been badly managed.*" In July, I find that the manager, in his report to the shareholders, states that "From the improved prospects of, and, in fact, the already advance, in tin ore, together with an improvement in some of our stopes, *we would strongly recommend that from 30 to 40 heads of stamps be forthwith communicated to Brenton's engine.*" The manager further states that he believes "the present to be a fitting time to take advantage of cheap materials and labour, to resume active operations in this mine; and that the last six months' operations will clearly show that, by increasing our stamping power, should the price of tin continue, profits will be made after the stamps are erected." As it was determined at the general meeting, held on July 10, to erect forthwith the number of heads of stamps, as recommended by the manager, perhaps Mr. Ennor will kindly inform the shareholders the ground upon which he made the statement that the erection of stamps was an evidence of bad management? The other points referred to by Mr. Ennor in his letter, the whole of which are adverse to the probability of anything like remunerative success being realised from Drake Walls, are, I think, conclusively answered by the report of the manager, when he states that "Since the last meeting we have continued the working by stoping on a limited scale, but at a sufficient rate to keep our stamps fully employed with our present supply of water. It affords me much pleasure in being able to state, by this means of working, *notwithstanding the* depressed price of tin, we have been able to pay costs, and keep the mine drained to our 70."

Although it is yet early days to talk about WEST DRAKE WALLS MINE, yet all my fellow-shareholders will, doubtless, agree with me that the unfavourable opinion expressed by Mr. Ennor is already being rapidly dissipated, for I find that in the City Article of last week it is stated that "The engine-shaft is now down 11¼ fms. from surface, on the Prince of Wales lode, and in ground favourable for minerals—a large branch, which came in the shaft from the north some time since, continues to produce occasional stones of tin and copper ores, which is regarded as very favourable for ore in depth." And the manager adds, "There is every reason to expect that at the 40 *the lodes will prove productive.*" What, then, becomes of Mr. Ennor's theory—that this is a piece of unmineralised ground?

Again, as to the PRINCE OF WALES MINE, it is a very singular fact that from the date Mr. Ennor published his letter in the *Mining Journal*, in which he somewhat equivocally referred to this property, the monthly profits have continued to progressively increase, as also the market value of the shares.

No one would, of course, presume to doubt the practical ability and experience of men like Mr. Ennor; but these facts are adduced simply to illustrate that, however eminent the practical or scientific man (I know the latter Mr. Ennor particularly despises), results in mining incontestibly prove that both are oftentimes all at sea.

A SHAREHOLDER IN THE THREE MINES.

PRINCE OF WALES, AND MESSRS. WATSON BROTHERS.

SIR,—The remarks of Messrs. Watson, in the Journal of July 13, remind me of a tyrant, who denies to everybody but himself the right to speak, think, or act, and like a mighty Autocrat reigns supreme, crushing to death the subjects who dare to question his majesty's immaculate policy; old or young, experienced or inexperienced, the hoary head not excepted, all alike must bow to the infallible opinion of the self-appointed Autocrat. Even Capt. Charles Thomas, a man of more than 50 years' practical experience, because he conscientiously gave his opinion, accompanied with a fair report of the mine, but by no means a flattering one, subjected himself to the lash of a pen dipped in venom, simply because his report was not considered conducive to the blowing of a bubble or the puffing of a mine. The writer of the report sent you by Messrs. Ward and Jackman, and published in the Journal of July 6, is neither afraid nor ashamed to sign his name to a report truthful in every particular. That Messrs. Watson perverted the truth will, I think, appear pretty evident to every impartial mind. They say the 55, west of cross-cut, is being stoped by six men. Now, this is positively untrue. My report does not say so, neither was it ever intended to be so read, but simply says, after describing the 55 west, that the back is being stoped by six men, which is positively and incontrovertibly true; observe it does not say the back west of cross-cut, but simply the back of the 55. If the mine is being worked to suit "bearing" operations, I should like to know the reason why the engine-shaft has not been sunk more than 4 ft. in eight months, and the north cross-cut driven about 6 fms. in the same time? How can we account for the ores being taken from the ends to stope the back on any fair and legitimate principles of mining? There is only one answer to this question, and that is the mine is being worked exceedingly fast, not to suit the operations of the "bears," but to suit the "bulls," so as to enable them to puff and exaggerate the merits of the mine. However honest and truthful Messrs. Watson and their agents may be, I regret to say a retrospect must remind them that they have been anything but successful miners; and yet those gentlemen have attempted to stigmatise a report as untruthful, simply because it does not suit their views.

Redruth, July 22. ABRAHAM JAMES.

"BULLS" AND "BEARS."

SIR,—In the month of March last, a Mr. Michell—the same gentleman, I presume, who writes in last week's Journal—wrote very disparagingly of the Prince of Wales Mine, and most encouragingly of East Russell. The former was then at 50s. to 55s. East Russell he strongly recommended at 3½, giving his reasons (as a practical miner) for the improvements that were to take place. After that time Prince of Wales shares rose to 70s., and East Russells have become unsaleable at 1½, after two heavy calls. I wish merely to ask, therefore, was it not notorious in the market last March that Mr. Michell was a "bull," or holder, of 300 or 400 East Russells, and a "bear" of Prince of Wales; and, further, was he not when he wrote the letter of July 18 a "bear" of Prince of Wales shares, and had he not been paying for the loan of them? The letter throughout shows the *feeling* that dictated it, and its fallacies are so apparent that it would be a waste of time to point them out.

ARGUS.

WHEAL TREVENNA, AND ITS MANAGEMENT.

SIR,—In consequence of several letters having appeared in the *Mining Journal* of late respecting the management of this mine, and as they are coming on my shoulders heavier than I can bear, in self-defence I am bound to reply. I refer you to my letter in the Journal of Dec. 29, 1866; there you will see what I stated about the amount of capital called up; also, that we have been working the mine short of funds from the commencement. Had such not been the case the mine would have been further developed, and been laid open to enable us to work on a much larger scale than at present. As regards my reports on the mines, I do not consider I have exaggerated the least: it is my opinion that Wheal Trevenna has been, and still is, one of the best young tin mines that has been opened up in Cornwall for many years. In about two years from the commencement we returned about 2000*l.* worth of tin, and kept the water with hand-pumps, and found the lode still productive; and to work the mine in a more economical manner, about twelve months ago we started a new engine-shaft, at that time intending to sink 36 fms. below the surface. On referring to my report in the Journal of Oct. 13, 1866, when I reported the shaft to be down 30 fms. In four weeks from that date, little did I think at that time that I should be obliged almost at once to suspend sinking the shaft, until about January 10, for want of funds, which was the case. Since Jan. 10 we have completed our shaft down 28 fms. below the surface, cut plat, driven cross-cut 15 fms., down 10 fms. on the course of the lode, rose up 7 fms. to hole to the bottom, where we raised the tin, and to ventilate the mine.

Now, as to the mine being inspected, I shall be most happy to meet any disinterested agent on the mine. Let him value the work done, and compare it with the cost-sheets, in my own hand-writing: then he will soon see whether there is sufficient work done for the amount of my cost-sheets. I will not be answerable for the amount of capital called up. About three months ago it was reported that a meeting was to be called, and to be held in Manchester, to investigate the affairs of the company from the commencement. Why was it not done? By this time, most likely, it would have been seen where the mismanagement is.

I reply to the letter from Halifax, respecting the "patient," I am happy to say the patient's health is good. All that is required is a little more victuals, for I am sorry to say it has been starved from the commencement. It has had but just sufficient to keep body and soul together: we are now doing the work that ought to have been done two years ago. Any persons who think proper to ask any questions respecting this mine I am quite prepared to discuss the matter with, providing they put their names to their letters; but I shall not be disposed to answer anonymous correspondents.—*July 24.* THOS. JENNINGS.

GREAT SOUTH TOLGUS MINE.

SIR,—I observe in Capt. Daw's report, dated the 11th inst., that he mentions not having heard from me since the 8th. My report of the above mine was sent to Mr. Thomas in due course, and the purport of it was an emphatic recommendation to alter the mode of working, or abandon the property; and the sooner the company act upon the suggestion the better for themselves.

FRANCIS PRYOR.

THE MINERAL RIGHTS ASSOCIATION (LIMITED).

SIR,—I think before my fellow-shareholders decide what course is to be pursued for the future, it would be as well if it could be stated what number of the shareholders who are in favour of winding-up the company are original allottees, or have paid 20s. each share. In my opinion, the fairest way would be, if the majority in favour of carrying on the company is as large as it was stated to be, to pass a resolution at a general meeting, authorising the directors to pay to all original dissentient allottees, or those who have paid 20s. for each share they hold, the sum of 10s. per share, and cancel their shares, and relieve them from further liability, which, judging from what passed at the meeting on Thursday week, would gladly be accepted by them. But if the majority of the shares held by the winding-up committee have been bought at a mere nominal price, and the agitation is continued in the hope of making a profit by receiving after a voluntary liquidation (say) 10s. or 12s. for each share, which may have cost them 5s. or 6s., I will certainly vote in favour of continuing the company, even at the risk of losing the whole 20s. paid, in order to sell the sharp-practised party who were the originators of the agitation. On the other hand, if the scheme of returning 10s. per share cannot be worked, and the shareholders in favour of winding-up (putting aside the question of directors' fees and the office pickings) can clearly show that they are *bona fide* allottees, or have paid 20s. for each share, I think, on the principle that "a house divided against itself cannot stand," it will be useless to attempt to carry on the company, and that a voluntary winding-up will be the most sensible way to terminate the concern.

ONE WHO HAS PAID TWENTY SHILLINGS PER SHARE.

THE LONDON LEAD COMPANY.

The following is the copy of a correspondence which has lately passed between the Court of Assistants, hereinafter called the directors of your company, and myself:—

TO THE SHAREHOLDERS. Lewes, March 23, 1867.

GENTLEMEN,—It is several years since I was in correspondence with you on the subject of an audit of the accounts of your company. It will be in your remembrance that the wish for such an audit was expressed to you in a written communication signed by shareholders whose respectability and *bona fides* were unexceptionable. It would be very easy to repeat and very much extend the basis of such a communication; but I have no present intention of taking upon myself the trouble of inviting such an one. Will you allow me very respectfully to suggest to you that the subject is one which cannot by any possible argument be dismissed as unreasonable, unusual, or unimportant? and I cannot bring myself to conclude that, in itself, it would be personally disagreeable to any one of your number. I rather hold to the idea that in practice it would be eminently otherwise, I am quite able to understand, and also quite candid enough to admit, that under the circumstances in which the appeal was formerly made to you, it might partake so much of the character of pressure as to make it uncongenial, if not unpleasant, and I did very much on that account (for which I hardly expect that you will give me full credit) withdraw at that time from any further effort about it. Circumstances are now wholly changed—years have elapsed, and you might comply unasked with our wishes, with perfect grace on your part. Such a step would, I doubt not, excite a very cordial feeling on the part of the proprietors; and, unless I am very much in error in my judgment, would be attended with very great ultimate satisfaction to yourselves. Should you prefer to send me a confidential reply to this communication, I will accept and strictly regard it as such, but I should prefer, if unfortunately you should not comply with the wish of myself and my friends, that you would rather write me such an one as I might print and circulate with this letter among all the proprietors.

BURWOOD GODLEE.

To the Governor and Assistants of the London Lead Company.

Lead Office, 9, St. Martin's-lane, Cannon-street, E.C., April 2.

SIR,—I am directed by the Court of Assistants of the Lead Company to acknowledge the receipt of your letter to them, dated the 23d ultimo, and to remind you that the question of the advantage of appointing auditors of the company's accounts was fully discussed on several occasions, when brought forward by you a few years ago. The Court are far from contending that it is not competent for you and other shareholders who desire it to re-open the subject; but they have every reason to believe that the general body are perfectly satisfied with the decisions come to on the occasions referred to. Without questioning the general proposition that the audit of the accounts of joint-stock companies is desirable, the Court of Assistants consider that the case of the Lead Company is exceptional. From the nature of the operations of the Lead Company, the bulk of the payments (large in the aggregate, but numerous and small in the items) for wages and other out-goings are made in the North, through the superintendent in Durham, who renders periodical reports and accounts. These, together with all other payments, receipts, and accounts of lead and ore on hand, are duly checked by the committee of the Court, and a further check is secured by the annual deputation to the North of the governor or deputy-governor, with one or more assistants, who investigate on the spot all matters requiring attention at the various establishments. The Court, consequently, consider that in appointing auditors, whether from the body of shareholders or professional persons, expense would be incurred without any real advantage. While, therefore, they are desirous of giving due weight at all times to the wishes of the shareholders, the Court of Assistants feel it their duty to adhere to the view deliberately expressed by that body on the 26th of March, 1863, when the matter was last under discussion.

THOMAS ELLIOTT, Secretary.

Burwood Godlee, Esq.

As it is proper that you should know the names of all the parties to this correspondence, and as but very few of you can be acquainted with those of your directors, I here insert their names:—

Governor—OCTAVIUS WIGRAM, Esq.
Deputy-Governor—JOHN WILLIAM BIRCH, Esq.
Assistants—

HENRY FORD BARCLAY, Esq.	HENRY WICKS GIBBS, Esq.
HERBERT BARNARD, Esq.	EDWARD MASTERMAN, Esq.
ISAAC BRAITHWAITE, Esq.	CHARLES HENRY MILLS, Esq.
JOHN GARRETT CATLEY, Esq.	DAVID SIMPSON MORICE, Esq.
GEORGE WODEHOUSE CURRIE, Esq.	HENRY TRITTON, Esq.

From the foregoing correspondence, it may be inferred that your directors admit the general proposition that the audit of the accounts of joint-stock companies is "desirable," and not liable to question. It would certainly have been remarkable had they thought otherwise; but the reasons they assign for considering that the case of the London Lead Company "is exceptional" are in themselves remarkable. They are—First, that the accounts between themselves and their servants in the North are properly audited by a committee of their number.—Secondly, that a general audit of their accounts would be attended by unnecessary expense;—and, lastly, that the body of shareholders deliberately expressed their views against an audit on March 26, 1863. Can it fairly be called "exceptional" for directors to "investigate and check" the accounts of their subordinates? Would it not be a gross abandonment of their duty as directors were they to omit so obvious a duty? And is it not difficult to understand how any respectable body of men can continue to act without *insisting* that their *own* accounts should receive the same investigation as that which they exact in the case of their own employees? The "expense" is so exceeding frivolous an objection to an audit, that I confess I am surprised it should be offered. The "view deliberately expressed by the body of shareholders in 1863" *means* that despite of the large power which directors always possess over meetings of shareholders, and after the full opportunity of using that power to the utmost extent, your directors then felt it proper and necessary, upon so very personal a question as the audit of their own accounts by auditors appointed by the shareholders, to tender their own votes against such audit; and although I cannot certainly declare it as a fact, yet to the best of my knowledge and full belief my motion in 1863 in favour of it was lost simply through the votes of the directors. Probably everyone whose attention is drawn to this letter, and who is unacquainted with the London Lead Company, as well as not a few of those who have long been shareholders, will learn with surprise that, beyond the fact that there has never been an audit of the accounts, several other facts not less extraordinary underlie this one, among which may be mentioned that up to 1860 no single shareholder beyond the directors, except he were one of their private friends, and by sufferance, had ever seen the slightest summary of any account whatever, that no notice of a general meeting had ever been addressed to any individual shareholder, and that, as a consequence, no shareholder, so far as I have been able to ascertain, had ever attended any one of those meetings. And, further, that if they had done so, no abstract of the accounts would have been produced or prepared for their inspection. It was only by much effort, and against much opposition on the part of the directors, that any one of these abuses was corrected; and although for 1859 and subsequent years an abstract of the accounts was eventually obtained, it was accompanied by the singular condition that the parties who obtained it should promise not to allow or cause it to be printed. The directors still persist in refusing to furnish any abstract whatever of the accounts previous to 1859. Copies of these accounts for the past nine years in manuscript, are now before me; but in virtue of my promise, I am prevented from printing and circulating them, as I should much prefer to do, along with this letter; and I must, therefore, confine myself to stating generally that they afford information which ought to have been possessed by you individually, from year to year, and which would have assisted you in obtaining some approximate idea of the value of your property. That the systematic concealment which has long been practised, and is still defended to the extent which I have now stated, can have done other than produce grievous wrong, no reflecting man can very well question; and under the circumstances I was quite prepared for the information which your Governor gave me in 1861, that "two thirds of the capital stock of the company" had previously fallen into the hands of the "*Court and their immediate Friends.*" A manifest objection (which everyone must explain for himself or herself) has always existed on the part of the directors to the quotation of the shares in the Stock Exchange list. I had some years ago all but secured such a quotation; but I gave up making any further effort upon finding that without their co-operation it was not possible for me to succeed in effecting it. The shareholders, generally in consequence of the prohibition to print even the unaudited accounts, practically never see or know anything about them, or of the real value of their property; and from this circumstance, and in consequence of the shares not being quoted in the Stock Exchange list, there is no market for them beyond that which is supplied through the secretary's office.

The first step to put an end to this state of things—and this is required in deference to that fair play which I believe that my countrymen especially value and love—is to insist upon a full, impartial, and complete yearly audit of the accounts, of which printed abstracts should be sent to each shareholder, after which everything else that is required would follow in natural sequence. You have but to make the demand, and these things will be done. You have a fine property—probably more valuable than you have at present reason to suppose, and the reforms of the last eight years have done much more to improve and equalise your income than you are aware of. The old system of hoarding profits for the purpose of suddenly dividing a large and unexpected return of "capital" (so called) *appears* to be now abandoned. The matter is in your own hands. I have already taken much more of the labour upon me than my fair proportion; but I am still ready to act if called upon by you, and I feel persuaded that your directors will, upon a more general expression of your opinion, be disposed to meet your reasonable wishes.

BURWOOD GODLEE.

Leighside, Lewes, June, 1867.

P.S.—Although £40,000, a sum equal to one sixth of the capital of the company, was divided among the shareholders in 1860—yet if the accounts were exhibited it would appear that *more than one-half* of the entire residue, *even now*, consists of investments in *Consols, cash*, and *securities for cash*, a state of things to which there may be no objection, provided every shareholder is fully cognizant of the fact.

B. G.

FOREIGN MINING AND METALLURGY.

The Coal Trade in the French department of the Pas de Calais is in an active state. Stocks have been sensibly diminished, prices are firm, and the extraction is active. This upward movement is occasioned by the approaching closing of the canals of the Nord. The state of metallurgy continues unfavourable in France; it is even worse, perhaps, in France than in other producing countries. The blast-furnaces have especially much to suffer, the price of pig being extremely low; in the Nord, although several furnaces have been put out of blast, the propriety of extinguishing others is still discussed. In the Meurthe and the Moselle industry seems to be in a relatively better state, thanks to facilities in respect to minerals; nevertheless, it has also suffered much in this district, both from the commercial crisis and from the uncertainty attending the future. But even in these respects the Meurthe and the Moselle are more favourably circumstanced than the Meuse, the Marne, or the Nord. A somewhat better demand for castings has been experienced. The artillery service has just ordered some projectiles in the Moselle; the price of heavy projectiles is 9*l.* 8s. per ton, and of small projectiles 12*l.* 16s. to 13*l.* 4s. per ton. The foundries of the Ardennes district are now forwarding castings to Lyons, although they have to sustain transport expenses to the amount of 1*l.* 9s. per ton. Of all the principal French siderurgical markets that of the Ardennes is the most distant from Lyons; the works of the Loire, Creusot, and the Franche-Comte ought to supply the wants of the great southern city, and the Ardennes must make very great concessions in order to obtain outlets for their products in this quarter. With regard to Creusot, it is stated that that great establishment is now producing a quality of coke-made plates which are equal to all that can be obtained with charcoal-made iron; the quality in question is known as No. 7. In the department of the Cher metallurgical industry is suffering severely from the present crisis; but for the requirements of the State, which continues to use the charcoal-made iron of the district in its marine establishments, one would be tempted to believe that the production of charcoal-made pig is on the eve of completely disappearing. The French timber trade has carried off in the Cher considerable quantities of wood, and the result has been a ruinous dearness of that combustible, which renders the situation a very difficult one to industrials who are not proprietors of forests, especially when the fact is taken into account that the minerals of the Berry are not very fusible, and that they absorb a great quantity of combustible. It should be added that the minerals dealt with have to support considerable expenses, either for rent to landed proprietors or for tolls paid to communes in connection with their conveyance over vicinal roads. These payments, when combined together, represent 5s. 10d. per ton on each ton of pig produced. The imports of minerals into France during the first five months of this year amount to 196,000 tons, of which 74,000 tons were from Algeria, and 80,000 tons from Belgium and the Grand Duchy of Luxembourg. During the same period 53,000 tons of pig were imported, of which 15,500 tons were admitted duty free, and 21,800 tons of iron, of which 19,000 tons were admitted duty free. The Douvrin Colliery Company (Pas de Calais) commenced the payment on Saturday of its obligation interest (18s. per obligation). Meetings are announced as follows:—Huelva Copper Mines Company, July 27, at Paris; Meurchin Colliery Company, July 27, at Bethune; Douvrin Colliery Company, Aug. 1, at Douvrin; Sougland and Fourmies Forges and Foundries Company, Aug. 5, at Paris; Longterne-Ferrand Colliery Company, Aug. 5, at Elouges.

The exports of minerals from Belgium during May amounted to 13,300 tons, as compared with 22,300 tons in May, 1866. In the first five months of this year the total exports of minerals were 65,500 tons, showing an increase of 800 tons. The exports of pig in the first five months of this year amounted to only 4200 tons, showing a decline of 3500 tons, as compared with the corresponding period of 1866. The exports of rails show a sensible increase this year, but, as has been previously indicated, the increase arises solely from the larger deliveries made to Russia. The total exports of rails to May 31 this year amounted to 43,900 tons, as compared with 25,500 tons in the corresponding period of 1866. During May 11,500 tons of rails were exported from Belgium, as compared with 7800 tons in May, 1866. Of the 11,500 tons exported in May 7800 tons went to Russia. A sensible diminution is noted in the exports of plates; in the first five months of 1866 they amounted to 7000 tons, but they declined to 5500 tons in the first five months of this year. The imports of minerals into Belgium have somewhat declined this year; thus in the first five months of this year they only amounted to 103,200 tons, as compared with 140,000 tons in the corresponding period of 1866; in May they amounted to 22,600 tons, as compared with 35,800 tons in May, 1866. The imports of pig into Belgium continue to present from month to month considerable augmentations, and they amounted in the first five months of this year to 22,100 tons, as compared with 8600 tons in the corresponding period of the preceding year; the greater part of the pig imported was derived from England. During May 4300 tons of foreign pig entered Belgium, while the corresponding total in May, 1866, was only 1400 tons. The report of the Namur Chamber of Commerce indicates that that province holds the first rank in Belgium in respect to the production of iron minerals; the last year 659 centres of working employed 4536 workmen, and furnished 797,470 tons of rough minerals, which produced 540,186 tons of washed minerals. The average sale price was 9s. per ton, and the cost price was 7s. 3d. per ton, exclusive of the rents payable to the proprietors of the soil; these prices are nearly similar to those of the preceding year. As regards the product of the workings, it presented in 1866 a decline of 88,000 tons, as compared with 1865. The contract for a great bridge from Waal to Bommel in Holland has been let to a German contractor, Herr Harkort, who has entered into an agreement with M. Gilleaux, a Charleroi forgemaster, for the manufacture of the greater part of the plates and girders. The amount of the tender of Herr Harkort was 106,370*l.*; and the highest tender was that of an English contractor—Mr. Brassey, we believe—who wanted 175,774*l.* for the work. Upon the whole, the Belgian iron trade is spoken of in unfavourable terms, prices being variable and badly supported. The exports of coal from Belgium in the five months of the current year amounted to 1,332,000 tons, or 250,000 tons less than in the corresponding period of 1866, and 61,000 tons less than in the corresponding period of 1865. During May, the exports were 300,000 tons, or 18,200 tons less than during May, 1866. The exports of coke have not followed the downward movement remarked in coal; on the contrary, they amounted to May 31 this year to 227,000 tons, as compared with 216,300 tons in the corresponding period of 1866. The imports of coal into Belgium continue to acquire more and more importance; they amounted to 40,900 tons in the first five months of 1866, but in the corresponding period of this year they increased to 171,100 tons; in May alone they were 36,300 tons, as compared with 9000 tons in May, 1866. Business in coal has not revived in Belgium of late; fewer transactions have, in fact, taken place, and the stock has increased, notwithstanding a fresh reduction in the extraction. Some coal workers have become alarmed at this state of affairs, but there is, probably, nothing alarming in it; there is at present a comparative stagnation in industry, but, putting that aside, the period of the year has now arrived in which transactions in combustible are ordinarily very quiet. Prices are feeble in the Centre and Charleroi basins, but at Liége the situation has improved of late, and prices have become firmer. The report of the Namur Chamber of Commerce gives us the following information with reference to the state of the collieries of the Lower Sambre during 1866:—The province comprises 40 concessions of coal mines, presenting a surface of 24,518 acres, and of these concessions 22 were last year in activity. The number of working centres, which was 31 in 1865, was last year increased to 35. The production amounted to 358,687 tons, yielding 113,647*l.* The cost of production was, however, 117,311*l.*, of which 68 per cent. referred to wages. The year's operations consequently resulted in a loss of 3664*l.*

Affairs in Chilian copper have displayed a little more activity at Havre, but the market closed at the last dates rather quietly, at 70*l.* per ton for disposable, and 70*l.* 10s. per ton for future deliveries. At Paris and Marseilles sales have been limited; prices have been feeble, and have displayed a downward tendency. On the German markets, the hope of an early improvement is still persevered in, but for the present business is restricted; the article is maintained nominally at former rates. Although the demand has generally become more moderate, tin has sustained its price on the Dutch markets. At Amsterdam and Rotterdam, although sales have presented little activity, holders have demanded and obtained 52½ fls. to 53½ fls.; while Billiton, of which 500 ingots have been dealt in at secret rates, is quoted firmly at 52½ fls. In consequence of the favourable advices from England and Holland, tin has maintained a good tone on the markets of France and Germany. Lead and zinc show little change.

THE IRON DISTRICTS OF ENGLAND AND NEW ZEALAND.—A movement has commenced in the "Black Country" for promoting emigration to Taranaki, in New Zealand. After years spent in experiments, a process has been discovered by which the Taranaki iron-sand, that lies in unlimited quantities on the sea shore, may be turned to profitable use. The New Zealand Iron and Steel Company are preparing to erect smelting-works, and the emigration of iron workers to Taranaki will establish an iron trade in all its ramifications.

An association has been formed at Birmingham, called the "Taranaki New Zealand Special Settlement Association," to effect for its members cheap and comfortable passages, and the formation of special settlements. Taranaki has already been called "the garden" of New Zealand; now she bids fair to become a large producer of a metal that has proved England's chief source of wealth. At a meeting held at Wolverhampton, Mr. Brame, of Birmingham, presiding, a specimen of bar-iron manufactured from the sand excited great interest, and the toilers of the "Black Country" seem bent upon pushing matters through to a successful issue.

Meetings of Mining Companies.

BRYN GWIOG MINING COMPANY.

A general meeting of shareholders was held at the offices, 42, Cornhill, on Wednesday,—Mr. BRIDGES SEWARD in the chair.

Mr. WILLIAM MICHELL (the secretary) having read the notice convening the meeting, the minutes of the last, having been circulated amongst the proprietors, were considered as read, and were confirmed. The accounts for three months, to end of June, showed a profit of 297*l.* 11s. 1d., and the total credit balance to the same date of 828*l.* 4s. 3d. The agent's report, which was considered as highly satisfactory, was read:—

July 22.—The 102, east of engine-shaft, has been driven on by four men, the lode being about 3½ feet wide, composed chiefly of spar, blende, and lead ore, and at times strongly indicates a great improvement, yet up to the present our expectations have not been realised—nevertheless it is a very promising-looking lode. About three months ago we commenced the sinking of a winze in the bottom of this level, and in opening out north from winze plat, &c., we met with a very productive portion of the lode. Although the bottom was worth at that time 2 to 2½ tons of lead per fathom, we followed on westward from that point, on a lode worth 4 tons per fathom, altogether north of the former level, and on this course we have continued for the past three months. The lode in the present end is about 5 ft. wide, and worth fully 4 tons per fathom. This I consider is a very important feature, as it appears to be keeping its regular course northwards from the old level. We have since resumed the sinking of the winze in the bottom of this level by eight men; the lode is now 5 feet wide, and worth about 1½ ton per fathom. The 90, west from the engine-shaft, has been communicated with No. 1 winze from the 75, the lode being, up to the holing point, worth 1½ to 2 tons per fathom; both back and bottom of this level are now being wrought by sixteen men on tribute. The lode in the present end, west of No. 1 winze, is 3 ft. wide, and worth 2 tons per fathom. We have commenced a new winze in the bottom of this level (90), and about 10 fms. to the east of No. 1 winze; the lode is 5 ft. wide, and worth fully 2 tons per fathom. We have at this point a good run of ore ground, 30 fms. in length, and still continuing on. The lode in the 90, driving east from No. 3 winze towards No. 1, is about 1½ ft. wide—blende, spar, and lead ore; worth of the latter about ½ ton per fathom, but I expect an improvement in this end shortly. The lode in the 75, west from the engine-shaft, is 2½ ft. wide, of a very promising character, and easy for progress. In the past month this end has been at a standstill, in consequence of our men being a little in fear about cutting into the old mine, and loosing water; but this I have endeavoured to remove from their minds by drawing the water from the old mine, having put on a pare of men for that purpose. By so doing I have discovered that the old party must have had a very long run of good lead ground, for 20 fms. in length. This run of ore ground is now about 20 fms. beyond our present 75 fm. level end, and which we shall press on as fast as possible. Bramwell's shaft has been sunk 4 fms. below the 66, and at present we are engaged in fixing skip-road from surface. We have fixed pit-head, pulley-stands, &c., and as soon as possible we shall commence drawing with the whim-engine from this shaft. We have in the past three months cleared and repaired over 50 fms. of the 66 fm. level, east and west of engine-shaft, which had been shut up for a considerable time, fixing new footways, &c., and resumed the driving of the 66 east, where we expect to meet a good run of lead. In our tribute department some of our pitches have fallen off in value, others have improved; but, looking at the future prospects, I consider it to be very satisfactory, although it will require a little time to properly open out the mine; but, even in doing this, I see no reason to doubt but we shall keep up our future returns similar to the past, and with about the same monthly expenditure. Men employed underground—On tutwork, 34; tributers, 40=74 men; at surface—including enginemen, smiths, carpenters, sawyers, and other labourers, washers, &c., besides carters of coal and lead, &c.—46 men and boys: in all, 120 hands.—STEPHEN HARPER.

Thanks to the Chairman having been passed, the meeting separated.

EAST WHEAL RUSSELL MINING COMPANY.

A general meeting of shareholders was held at the offices of the company, Austinfriars, on Wednesday,

Mr. JOSEPH PROCTOR in the chair.

Mr. J. H. MURCHISON (the secretary) read the notice convening the meeting, and the minutes of the last were approved.

The following report of the agent was then read:—

July 22.—I beg to hand you my report, showing the work accomplished, together with the present prospects of the mine, since the last general meeting. In the 150 the trip-plat is completed. The 150 fm. level cross-cut has been extended 4 fms. 5 ft. 6 in., the ground generally being hard and compact. In the present end the middle lode has been intersected, and cut into about 4 to 5 ft., which is composed chiefly of iron, capel, quartz, and mundic; the lode is troublesome to explore, and there remains some 9 to 10 fms. to drive to reach the north lode. Ede's cross-cut, driving north in the 140, has been extended 5 fms. 0 ft. 5 in.; the ground generally is spare for progress. The north lode has been intersected, and cut into full 2 fms. 1 ft., composed chiefly of capel, elvan, quartz, mundic, iron, spots of grey sulphuret, and malleable copper ore; at the furthest point reached the lode contains more iron, and a little easier for progress. The lode so far that has been cut into (which is full 13 feet) does not present such a promising appearance as in the 130, above. The 140 east has been extended 16 fms. 1 ft. 9 in.; the lode varying in size from 3½ to 5 ft. wide, and in value from 20*l.*, 12*l.*, 8*l.*, and 6*l.* per fathom, and a portion was of no value; the lode in the present end is 2½ ft. wide, producing a little saving work, worth 1*l.* per fm., and presents a promising appearance. About 7 fms. 2 ft. only has been stoped in the back of the 140, east of Friend's winze, the value of which was from 2*l.* to 4*l.* per fathom; present value 1*l.* per fathom. Davey's cross-cut, driving north in the 130, has been extended 4 fms. 5 ft. 4 in.; there remains, by calculation, about 9 ft. to reach the lode; the stratum is highly mineralised. The intersection of the lode to the east of the slide is an important point, being parallel with the ore leaving the main lode. In many cases the ore has been known to give way from one lode, and make in the parallel lode. Doidge's winze, in the bottom of the 130, has been sunk 2 fms. 4 ft. 6 in.; lode varying in size from 3 to 3½ feet wide, and in value for a short distance 15*l.* per fathom; the lode in the bottom is not to value. The sinking of this winze has been suspended, on account of water. When the 140 is sufficiently advanced it will drain the water, when the sinking will be resumed. By the foregoing report you will perceive that the prospects of the mine have not in any way improved, so far as the lode has been cut into. In the 140 fm. level cross-cut (Ede's) the lode has not proved anything equal to what would be anticipated by the fine-looking lode in the 130. For the future development, the 150 fm. level cross-cut will be extended north, for the intersection of the north lode; also the north lode to be driven through in the 140 fm. level cross-cut, and the 130 fm. level cross-cut (Davey's) to be extended to the north lode. The ore sampled last time, and sold on July 18, to weigh on July 26, was computed 124 tons, but will weigh over 144 tons.—J. GOLDSWORTHY.

The cash account showed a balance in hand of 253*l.* 19s. 9d. The general statement showed a balance of liabilities over assets of 429*l.* 15s. 3d., without including the ore sold on July 18, the value of which was about 520*l.*

The CHAIRMAN moved that the accounts be passed and allowed.

The SECRETARY, in reply to a question, stated that the loss on the past three months was 927*l.*, as against 1110*l.* during the preceding quarter.

Mr. WALLER wished to know if that comparatively favourable result had been realised by a reduction in the working expenses, or by an increase of ore raised?—The SECRETARY said that the working expenses were about 100*l.* less, while sales of ore had realised something like 100*l.* more.——Mr. GOMPERS asked what was the estimated amount of the next sampling?—Capt. GOLDSWORTHY said it was impossible to say until the tributers had taken out the ore; he should think it would not be 100 tons, but it was quite impossible for anyone to say within 10, 15, or 20 tons, for the tributers might come into a bunch, and unexpectedly turn out additional tons.

The SECRETARY mentioned that the Duke of Bedford had agreed to allow the dues to remain at 1-24th for two years longer—which was the same as for the last two years.

Mr. MICHELL could not help remarking the great difference in the general character of the report just read and those submitted upon previous occasions. He thought if the mine did not present better prospects than those stated in the report that the shareholders should seriously consider the question of discontinuing operations. Upon a previous occasion they were informed the lode in the 130, east of the slide, was worth 25*l.* per fathom, and now, according to the report, it was not worth 4*l.* per fathom.——Capt. GOLDSWORTHY said it did not hold up 6 in.——Mr. MICHELL could not understand how Capt. Jas. Richards came to telegraph to the effect that east of the slide the lode was worth 25*l.* per fathom, when it did not hold up 6 inches.

Capt. GOLDSWORTHY said that that particular point had not been seen since that time, simply because it was not open—indeed, he (Capt. Goldsworthy) had never seen it at all; but Capt. Richards had telegraphed it of that value, and, therefore, it was there now. All he had to say was that he had not in any way deceived the shareholders; and whatever statements anyone might make adversely affecting him, his only answer was that he challenged a proof, and in the absence of that mere statements were less than valueless.

Mr. GOMPERS said that Capt. Goldsworthy could not be held responsible for any telegram that Capt. Richards might think fit to send. If Captain Richards were misled, certainly the shareholders could not hold Captain Goldsworthy responsible, and it must be recollected—if only in justice to Capt. Goldsworthy—that at the time that telegram was sent to the office Capt. Goldsworthy was in London. When Capt. Richards was present these questions were never raised, and it was unfair to raise them in his absence.

Mr. MICHELL said that a telegram was sent by Capt. Goldsworthy the day before the meeting, to the effect that the ore was cut in the 140, and Captain Richards telegraphed the next day that "a good course of ore had been cut in the 140, worth 25*l.* per fm.;" and that was followed up by a letter from Capt. Richards, which was received in London the next morning.

Mr. GOMPERS asked Capt. Goldsworthy if he had ever seen the lode?—Capt. GOLDSWORTHY said he had already stated he had not. He was in his gig coming away for London when the men were coming from underground, and they told him that there was an improvement in the 140, and the stones they had brought up he conveyed to London. The point was now let at 6s. 8d. in 1*l.*, but it had not been practicable to work it before the level was drained.

A SHAREHOLDER supposed Capt. Goldsworthy was not afraid it would turn out too rich?—Capt. GOLDSWORTHY was afraid there was no reason to apprehend anything of that sort.

Mr. WALLER said it was a question to be seriously considered as to the desirability of not further exploring such parts of the mine as were unproductive, yet costly, and merely continue operations at such points as there was some foundation for hope. He understood that some time since the "reserves" in the mine were valued at 12,000*l.*; if they were of the same value now he should most certainly suggest the advisability of realising them, if possible. He would ask if the expenses could be reduced in any way?—Capt. GOLDSWORTHY said they had been reduced, and as soon as the lode was cut in the 140 the shareholders would be able to decide as to the best course to pursue. The several cross-cuts recommended by Mr. Mitchell and others had been put and abandoned.

The SECRETARY remarked that Capt. Goldsworthy had mentioned to him that the cross-cut in the 130, to intersect the north lode east of the slide, was an important point, the richest part of the lode already worked being east of the slide. This point will be reached in a few weeks. The prospect of a good lode being cut was good.

Mr. LITTLE said it appeared to be strange that, according to Captain Goldsworthy's reports, hitherto everything was good, but now everything was bad.

Captain GOLDSWORTHY said the simple reply to that question was that he had always reported upon the mine as it stood when he inspected it, without fear or favour.——Mr. MICHELL contrasted the report presented at the last meeting with that now before the meeting, stating that the former was full of hope and encouragement, while the latter was of a totally different character.

Capt. GOLDSWORTHY said the mine then and now presented a different aspect.

After some further discussion the accounts were passed and allowed, and a call of 4s. per share was made.

The appointment of Capt. W. Richards (late of West Sharp Tor Mine) as the agent, in the room of Capt. Goldsworthy was confirmed.

Upon the proposition of Mr. GOMPERS, seconded by Mr. INMAN, a vote of thanks was passed to Capt. Goldsworthy, for his past services.

The SECRETARY drew attention to the fact that a telegram had been received, stating that the lode had been cut in the 140 north, worth 90*l.* per fathom. Thinking it somewhat suspicious, he immediately telegraphed to the mine and also to Tavistock, to ascertain its truthfulness or otherwise, the result of which was that it proved to be utterly false.

It was agreed that the matter should be fully investigated.

A vote of thanks to the Chairman and committee terminated the proceedings.

SCOTTISH AUSTRALIAN INVESTMENT COMPANY.

The half-yearly general meeting of shareholders was held at the London Tavern, yesterday—Mr. CHARLES WHETHAM in the chair.

Mr. C. GRAINGER (the secretary) read the notice convening the meeting. The report of the directors (an abstract of which appeared in last week's Journal) was taken as read.

The CHAIRMAN stated that the first point to which he would direct the attention of the proprietors was that of the Pyrmont Bridge, upon which there had been no dividend earned, nor had any portion been carried to the profit and loss account during the six months. He had no doubt that the population of Darling Harbour would increase, which, of course, could not fail to increase the profits of the bridge in a corresponding ratio, and ultimately yield good dividends. The only other point in the position of the company's affairs was the large balance at the bankers, amounting to 13,070*l.*; but it arose in this way—on June 30, a large amount had to be paid in the shape of interest upon debentures and interest upon preference stock, so that on July 1 that amount would be considerably reduced. The shareholders had seen in the report the statement of Mr. Morehead, to the effect that the stock had been increased, which was a matter of considerable importance. He further stated that hitherto the banks in Australia had undertaken a business peculiarly their own, in the shape of advancements upon land—a business, he need hardly say, which properly came within the province of an investment company; but the result had been that many of those banks now found that they had more deeds in their hands than were agreeable to their respective proprietaries. At the present time the directors of this company were giving for their debentures 5 per cent., whereas the Bank rate was only 2 per cent., and he intended to propose to his colleagues on the board that this rate of 5 per cent. should be reduced. As to the 6 per cent. preference stock, three-fourths had gone off, and they had now to place 53,000*l.*, which he was sure would soon be taken up. He then referred to the fact that Mr. Morehead was now present, having left Australia on account of ill-health; but he (the Chairman) was glad to say that Mr. Morehead's health was improving. (Hear, hear.) Having expressed his great satisfaction at the company's general position and prospects, he concluded by moving that the report and balance-sheet be received and adopted.

Mr. J. D. DE VITRE seconded the proposition.

A SHAREHOLDER wished to know if the Lyndhurst estate had been improved as anticipated, by the erection of the Pyrmont Bridge?——Mr. WRIGHT asked if the reserve fund were invested in Government Securities, because, if it were not, he should move a proposition that it should be so invested.——Mr. WARD could not approve that suggestion, having regard to the general character of the investments.

Mr. YOUNG, in reply to a question, stated that he thought it would never occur that capital would be raised in this country upon debentures at less than 3 per cent. per annum. He further explained, that although he did not look forward to a very rapid development of the Lyndhurst estate, yet as the population increased they must go to Sydney, which would render that property progressively valuable. It could not fail to be satisfactory to the proprietors to find that, with all drawbacks, the general profits of the concern enabled the directors to pay a dividend of 10 per cent. without carrying to profit and loss any of those things which must in time turn out to be valuable.

Mr. MOREHEAD, in reply to a question, stated that the question of obtaining the extract of meat was just now attracting great attention in Australia, and a great quantity was being obtained both from sheep and cattle. He confessed that at first he was exceedingly doubtful as to the result of Liebig's process, but he must say he had altered his opinion very much, and he now thought there was a very strong probability that it would become one element in calculating the value of the company's property.

The CHAIRMAN said there was no doubt the Lyndhurst estate would improve in value, and in all probability the Government would some day purchase the bridge. As to the pastoral estate, it was mortgaged to the company, and was now falling into their hands, and would no doubt return the money advanced. The reserve fund was invested in the general property, and he thought it was, without doubt, far safer to do so, as they all firmly believed their investments were good. Surely it was better to get 10 per cent. than it would be to buy Government securities, and get only 3 per cent. If the amount were large, he should look at it in a different light; but the fact was it was kept more with the view of equalising the dividends than anything else.

The motion adopting the report and accounts was put and carried unanimously, and a dividend at the rate of 10 per cent. per annum (less income tax) was declared.

A vote of thanks to the Chairman, directors, and to Mr. Grainger (the secretary) was passed, when the meeting separated.

VAL ANTIGORIA GOLD MINING COMPANY.

The second annual general meeting of shareholders was held at the offices of the company, Great St. Helen's, yesterday,

Mr. STAUNTON in the chair.

Mr. J. C. GOODMAN (the secretary) read the notice convening the meeting. The accounts were taken as read.

The CHAIRMAN said the slow progress that had been made at the works during the past year had arisen partly from the war in Italy having abstracted some of the most skilled labour, and partly from the monetary crisis, the directors thinking it would not be very prudent to make a call upon the shareholders. That was the reason the expenditure at the mines had been reduced; but the necessary machinery had now been ordered, and he believed it would be ready next week, so that in the course of a few months—say, early next spring—eight mills would be completed, which, with the two already at work, would yield a satisfactory increase in the returns. He moved that the balance-sheet be received and adopted.

Chev. FRANCFORT said he had hoped to have been in a position to report greater progress at the works, but an examination of the balance-sheet would show that the expenditure during the whole of the year had amounted to only 1300*l.* He need hardly say that in any new concern it was utterly impossible to produce great results with such a small expenditure. He considered that the Val Antigoria Mine was a property of great promise, although, for some reason or other, an impression had gone abroad that it had proved a failure. He had no hesitation in saying that it contained all the elements of success, and if they took into consideration the small amount of capital paid-up—17s. 6d. upon 20,000 shares—they would see that a comparatively small amount of monthly profit would enable the directors to pay large dividends. He was more than ever persuaded that it would not only pay satisfactory dividends, if it were put in a condition to do so; indeed, that all the anticipations held out at the commencement of the enterprise would be fully realised. They had the ore, but at present had no means of bringing it to surface economically. If the directors thought it prudent during the monetary crisis of last year not to call upon the shareholders to contribute the necessary capital, they could not expect that he could produce satisfactory returns. The directors acted, no doubt, with the best possible intentions, but he, as the manager of the concern, would tell the shareholders as he had told the directors, that large returns could not be expected unless the necessary machinery were erected; but when that machinery was erected the Val Antigoria Mine would bear favourable comparison, considering the expenditure, with any other gold mine in Italy. The gold produced was of the finest quality, being worth 4*l.* per oz. The machinery which had been ordered would be erected as speedily as possible. The mine had this advantage, they would be able by the apparatus he had devised to raise the ore from the mine into the amalgamating-mills, which would effect a very large saving in carriage. The report just received, which appears in another column, would show they had reached a piece of ground which was producing 1 oz. of gold per ton of ore, and he might mention the fact that the Val Antigoria Mine had, in its working during the last century, shoots of ore which were said to have yielded from 20 to 30 ozs. of gold per ton of ore, and present indications seemed to warrant the belief that a similar discovery would soon be made.

Mr. SLOUS asked what would be the estimated cost of the eight mills, and what number of tons they would treat per diem?—Chev. FRANCFORT said the cost of the eight mills would be about 3000*l.*, but that would include the completion of the water-course and various other works, as would enable them to gradually add 20 more mills. He considered the cost of each mill, *per se*, from 80*l.* to 100*l.*; and as to the quantity of mineral that 10 mills would treat, he calculated it at about 6 tons per diem. By the time those eight extra mills were erected they would be able to keep them fully supplied with ore.

Mr. SLOUS thought the wrong impression as to the value of the mine would have been averted had the general meeting been held half-yearly, and suggested that in future half-yearly meetings should be held.——The CHAIRMAN said that, as far as the directors were concerned, they would be only too glad to meet the shareholders half-yearly.

Mr. BEGBIE said it was quite clear that, like any other manufacturing concern, capital must be supplied before returns could be realised.

Chev. FRANCFORT (in reply to a question) stated that 10 mills kept fully supplied with ore would yield a considerable profit, and they would be able to work all the year round—that is, an average of 25 working days per month.

Mr. SLOUS said he had recently returned from a visit to the Italian gold mines, and he could testify to the fact that everything was being done that skill and energy could do to bring about satisfactory results.

After some further discussion, the balance-sheet was received and adopted.

It was agreed that in future half-yearly meetings be held.

A vote of thanks was passed to the Chairman and directors, and also to the manager (Chev. Francfort), when the proceedings terminated.

ENGLISH AND AUSTRALIAN COPPER COMPANY.

An extraordinary general meeting of shareholders will be held at the London Tavern, on Aug. 1, when a statement of the company's affairs since the last meeting will be presented, from which we learn that the gross quantity of ore delivered to the works by the South Australian Mining Association, from July 1 to Dec. 31, 1866, as compared with the same period in the preceding year, has been—

1866—2486 tons 11 cwts. ..... 1865—3602 tons 18 cwts.

The gross quantity of regulus and ore received from other mines has been as follows:—

	1866.	1865.
Regulus	Tons 382 12	Tons 435 20
Ore	1440 17	656 16

The quantity of ore smelted at the Burra Smelting-works, from July 1 to Dec. 31, 1866, was—

1866—1498 tons 5 cwts. ..... 1865—1863 tons 12 cwts.

The quantity of regulus and ore smelted at the Port Adelaide Smelting-works, from July 1 to Dec. 31, 1866, was—

1866—2811 tons 14 cwts. ..... 1865—2613 tons 13 cwts. 2 qrs.

The quantity of copper made at the Adelaide Smelting-works, from July 1 to Dec. 31, 1866, including the rough copper sent from the Burra Smelting-works to be refined was—

1866—901 tons 9 cwts. 0 qr. 22 lbs. .. 1865—1001 tons 3 cwts. 1 qr. 7 lbs.

The quantity of copper shipped from South Australia during the half-year ending Dec. 31, 1866, has been—

1866—637 tons 10 cwts. ..... 1865—604 tons 15 cwts.

BURRA BURRA MINE.—The ore received from this mine in the six months of 1866 was—2486 tons 11 cwts., against 3602 tons 18 cwts. for the six months ending Dec. 31, 1865. In the report presented to the shareholders at the meeting on Feb. 21, 1867, it was stated that the mine was in full work, and that the operations for its further development were being carried on. It was hoped that this would continue until better prices for copper and a reorganisation of the South Australian Mining Association would enable them to take more vigorous steps. The mail, however, which was delivered in London on June 14, brought intelligence that the active working of the mine was suspended on March 28. The reasons for this important step are given in the following extract from the report presented by the directors of the South Australian Mining Association to the shareholders at the general meeting, held at Adelaide on April 17, 1867:—"After full consideration of the information and results now submitted, and in view of the continued depreciation in value of the only article produced by the association, the shareholders will not be surprised to learn that the directors, in spite of their efforts to reduce expenditure, have found it impossible to continue the further raising of ore without incurring much greater loss than they feel themselves justified in submitting to, and that they have, therefore, been reluctantly compelled to order its discontinuance since the 28th ultimo, confining their operations, for the present, to keeping the water out of the principal workings of the mines, sinking Grave's engine-shaft, and washing and dressing the halvans and the reserve of low class ore in the Burra Creek. While the directors have considered this course necessary under existing circumstances, the shareholders will not fail to observe, by the productiveness of the mines during the last few years, by the last and former reports of the chief captain, and by other information from time to time afforded them, that the active working of the mines is not now suspended because the ore is exhausted, but simply because it would be impolitic to continue to raise thousands of tons of, probably, the richest ore in the world, not only without profit, but with an absolute certainty of loss while copper remains at its present price. "Meantime the directors have arranged that the future expenses shall be as moderate as possible for taking charge of the property, and overlooking the few hands employed at the mines; and also for conducting the business in Adelaide, most of which expenses they confidently hope to pay by the proceeds from the halvans and Creek ore."

It will be observed from this extract that the active working of the mine was not suspended before the ore was exhausted, but as a matter of policy, and that it was hoped the time would soon arrive when its operations might be resumed. In the meanwhile the water would be kept out of the principal workings, and the mine kept in a state for the resumption of operations at any time. A considerable quantity of ore would remain to be delivered to this company after the suspension on March 28; and, pending a resumption of operations at the Burra, the directors, aided by the zealous efforts of the manager and staff at Adelaide, hope to meet the deficiency in this branch of the company's business by increased supplies from other sources, and by the most stringent measures of economy which can be adopted without in any way impairing the efficiency of their establishment.

SUPPLIES OF ORE FROM OTHER SOURCES.—It will be observed that these continue to show a steady increase. The quantity of ore and regulus received in the six months ending Dec. 31, 1866, was—1823 tons 8 cwts., against 1092 tons 15 cwts. for the six month ending Dec. 31, 1865; and, as already stated, every effort would be made to extend this branch of the company's business.

COPPER MARKET.—Since the annual meeting in February the copper market has remained without animation. The improvement expected at the commencement of the year in all branches of business has not been realised; and the metal trade, far from being an exception, has, perhaps, been more depressed than any other.

EXTENSION OF THE WHARF AT PORT ADELAIDE.—Instructions have been sent to the manager at Adelaide to employ all spare labour and materials in the extension and improvement of this valuable property.

PARIS EXHIBITION.—The directors, considering it would be advantageous to the interests of the company to make their manufactures more extensively known on the Continent, sent specimens of their copper to the Paris Exhibition, and they are happy to inform the shareholders that the jurors have awarded a prize medal for its extreme purity.

SIX MONTHS' WORKING TO DEC. 31, 1866.—The directors consider it necessary to impress upon the shareholders at each half-yearly meeting that the statements laid before them are an estimate only, framed with the utmost attention to correctness, but liable, of course, to be modified by the operations of the subsequent six months, and the stock-taking at the close of the year. The financial statement shows an estimated profit of 5678*l.* 8s. 7d. for the half-year, reduced to 3788*l.* 16s. by over-estimate of copper on hand June 30, 1866, and by restoring the small amount required to make up the last dividend. This will be sufficient for the payment of an *ad interim* dividend of 1s. per share, after paying interest at the rate of 5*l.* per cent. to the reserve fund. The reserve fund at the present date stands at 11,382*l.* 9s. 6d.

AUSTRALIAN MINES.

YUDANAMUTANA COPPER.—Captain Anthony (May 18) reports—Eight men are still employed stoping the bottom and back of the 10 fm. level. Ore broken during the month (say) 30 tons, of 16 per cent. We have opened a branch lying between the big bunch and No. 2 shaft at the 20 fm. level, and I am, so far, highly pleased with its appearance. The ore smelted during the month is 208 tons, and the quantity of copper made is 25 tons. This is the result of two furnaces, with a short interval for making repairs, &c. Nos. 1, 2, and 3 furnaces are now in a good working state; Nos. 1 and 3 are in full work; and No. 2 will be lighted on the 25th. I hope to be able to make 11 tons of copper weekly. We have again been favoured with a heavy rainfall. [There had been shipped on board the Indus, 12 tons 16 cwts. of copper, and a further quantity of 20 tons would be sent in the same vessel.]

WORTHING.—Legg's engine-shaft is still being sunk under the 73 fm. level, and the ground shows more strings of ore than has ever been seen before since the lode left the shaft. In the 73 fm. level cross-cut, west of Legg's engine-shaft, they have cut a caunter branch, about 1 ft. wide, composed of rich yellow ore, mundic, and white quartz, and from present indications a lode is near at hand. The stopes are looking much as usual, with the exception of what has been taken away. The financial statement is much more satisfactory, and the reports generally are very encouraging. Ore in reserve underground opened up, from 3000 to 4000 tons, besides the piece of ground now standing south of the present workings from the bottom of the 53 to the back of the 73 fm. level. This piece of ground will yield from 3000 to 4000 tons of ore, providing it yields anything like the bottom of the 53 fathom level, which now stands, and I see no reason why it should not. We certainly have had difficulties, owing to the slides in the 63 fm. level, but I hope that it will soon be over, from the present indications. The machinery and dressing going on as usual. Quantity of ore raised in the month, 220 tons; regulus on hand, 18 tons; and 121 tons of ore; number of hands employed, 131.

YORKE PENINSULA.—The local committee write—"We are in receipt of your favour of March 26, intimating that another effort will shortly be made to raise funds for working the Kurilla Mine. As to the probable expense of proving the mine thoroughly, we do not see that we can give you more information than you have already before you. Captain Dunstan advised in the report sent you another two months' work. Our monthly expenses for mining were about 150*l.*, but, of course, much would depend on the hardness of the ground we had to drive through. In reply to your queries as to the Kurilla lodes, they are parallel to, not continuous of, the Wallaroo lodes, both running east and west at about half a mile distance from each other. The character of the ore is much the same, but of the two the Kurilla is richer in quality."

GREAT NORTHERN COPPER.—Capt. Tonkin (May 18) reports—The lode in the end west of the long cross-cut is improving in size. We have broken some good stones of ore during the week. The lode is not rich at present, but improves as we are driving, and there is no doubt we shall have a large deposit of ore. I have sent away this week a small parcel of copper ore, and have made arrangements for having what is left carted away next week.

ENGLISH AND AUSTRALIAN COPPER.—The quantity of coal at Kooringa was 1513 tons, at Kapunda, 160 tons, and at Port Adelaide 720 tons. There were three furnaces at work at Kooringa, and all the furnaces at the Port Works, except one melting-furnace out for repairs, and one refinery whilst stocking copper. [Since last advices a shipment of 200 tons of copper had been made.]

FORTUNE COPPER (W.A.).—Capt. Penberthy (April 30) reports—The different points of operation throughout the mine are looking well. We have stoped 51 fms. of ground, being 6 fms in excess of any month since the mine has been worked. We have dressed this month 93 tons of lead ore, from fit to 80 per cent., and 7 tons of copper ore, from 15 to 17 per cent.; also forwarded to port 82½ tons.

SCOTTISH AUSTRALIAN.—The sales of coal for April amounted to 11,487 tons. The assistant-superintendent writes—Lambton Colliery continues to progress in the usual satisfactory manner, and although our sales for the last month are somewhat less than for each of the three previous months, still they are very fair (11,487 tons), and our average since Jan. 1 amounts to 14,083 tons per month, or equal to upwards of 169,000 tons a-year.

PORT PHILLIP AND COLONIAL GOLD.—The quantity of quartz crushed during April was 4629 tons, yielding 2240 ozs. 16 dwts. of gold, or an average of 9 dwts. 16 grs. per ton. The receipts for the month amounted to 8238*l.* 15s. 2d.; expenditure, 5015*l.* 4s. 9d.; leaving a profit for the month of 3223*l.* 10s. 5d. Of the above sum I divided 3000*l.* between the two companies: 1950*l.* to the Port Phillip Company, and 1050*l.* to the Clunes Company. The above is a satisfactory return as compared with March, both in respect to quantity crushed as well as yield, the latter having improved to the extent of 1 dwt. 1 gr.

per ton; and this improvement has been more than sustained during the present month, the yield for the first fortnight being 13 dwts. 9 grains per ton, from 2363 tons; and the third week promises to be still better. The depth of the shaft is now 543 ft. from surface. Remittance, 2000*l*. The return for the first three weeks of May is 3547 tons, yielding 2434 ozs. 2 dwts. of gold, or an average of 13 dwts. 17 grains per ton.

CADIANGULLONG COPPER.—During the month there were sampled 105¼ tons of ore, averaging 12⅛ per cent. for copper, and estimated to yield 12¼ tons of fine copper. The mine has exhibited an improving appearance. There have been shipped to London, per the Result, 12½ tons of fine copper. A further small quantity had been sold at Sydney, and 13 tons more would be completed at the works, and dispatched to Sydney by the end of the month. Captain Holman reports—"There is now a fair supply of ores at the smelting-works to ensure a full average return for the ensuing month, and the delivery of firewood continues a little in excess of the consumption." A quartz reef has been discovered on the company's property, which appeared to promise to contain gold in remunerative quantity. It had not, however, been sufficiently opened or tested to enable Capt. Holman to judge of its character or probable yield; and, therefore, the directors are unable to state at present whether or not this discovery is likely to have a favourable bearing on the company's interests."

AUSTRALIAN MINING COMPANY.

It is alleged that there exists an imminent probability that the future destinies of this company may lapse under the exclusive control of Messrs. COLLIER (Brothers), two of whom, members of the same firm, have proposed themselves for election as directors on Monday next. It transpires, at the eleventh hour, that information and facilities available to Mr. HENRY COLLIER preferentially have obtained for an organised minority powers to acquire an absolute mastery of the situation, unless that gentleman shall forego his opportunity from a due sense of fair play.

The maximum number of directors is five, of which three suffice for a quorum (the ordinary number attending), so that two can dominate. Moreover, Mr. COLLIER is assumed to have still another place at the board virtually in his gift, that of Mr. J. ANDERTON (incapacitated by infirmities). Neither the integrity nor the ability of the COLLIER family is impeached, but warning should be taken in these times against absolutism, as such, even though the bold man who would assume it were immaculate or immortal. The custom in this company has heretofore been to prefer one of the auditors for a vacant directorship. Those who constitute the present board have, accordingly, all passed up through the auditorship; and yet the precedent is sought to be ignored, notwithstanding that the office is confessed to have been efficiently discharged by a candidate for the directorship in rotation, who holds more shares than the three acting directors put together, who has challenged and received their admission of his aptitude for the vacant post, but who has been kept in ignorance of Mr. F. COLLIER'S pretensions until too late for effective defence under the cumbersome charter of the company.

There are two parties at the board and in the company: the one has been prone to mining adventure, the other to selling off the properties. The one party was led by the Chairman, the other probably by Messrs. COLLIER, as auctioneers at Adelaide, where the property was put up for sale. The middle course is represented by that policy which has always advocated "a preservation of the properties from sacrifice, leaving mining adventures to local tributary enterprise."

The following notice of motion, given in timely advance of the coming meeting, has been refused acceptance for circulation from the company's offices, when too late for circulation independently:—

"To ask the opinion of the ensuing meeting as to the desirability, or otherwise, of restricting the powers of any future board to make calls; to purchase or rent properties; to issue promissory notes; to borrow moneys, or in various other modes to pledge the credit of the company, as specifically legalised under the existing Deed of Settlement." Also—

"To invite the board to make arrangements whereby, henceforward, information which can be divulged without injury to common interests may be afforded at the office to enquiring shareholders, even if not of sufficient apparent importance to be transmitted by circular to all."

Shareholders alive to the importance of securing safety in the middle course above indicated, should attend the meeting in person (overriding proxies given in ignorance), and select representatives for themselves.

MINERAL WEALTH OF LAKE SUPERIOR.

THE ISLE ROYALE COPPER DEPOSITS.

Lake Superior is visited by the summer tourists of America for its salubrious climate, its pure water, and its romantic scenery, but it owes its chief attraction to the beautiful Isle Royale. This island lies upon the Lake like an open hand, the fingers and thumb of which form excellent harbours and land-locked bays; its shores are encrusted with cornelian, agates, and malachite formations, chrolastrolites being very abundant. The parallel ridges of mineral land that extend the entire length of the island enclose numerous lake-lets that find their outlet in rapid streams, through gorges, cascades, &c. For its fisheries and its facilities for boating and yachting Isle Royale has no equal on the Upper Lakes.

The island has lately been explored and surveyed by Captain Wm. Plummer, of the West Canada Mining Company, and by Mr. Wells D. Walbridge, late of Detroit, but now of Ruby City, Idaho Territory, U.S. The reports made by these distinguished gentlemen fully confirm the statements of the eminent geologists and explorers who have preceded them; and by the ore forwarded to this city they have fully demonstrated Isle Royale to be a counterpart of Keweenaw Point. A very fine specimen of native copper is now on exhibition at the office of this Journal; such ore in immense masses abounds in the mines upon the southern shore of Lake Superior—in the Minnesota, the Cliff, the National, and the Quincy Mines. Many of these masses have been too large and unwieldy for profitable mining, but of late the conglomerate formation has been successfully worked, and copper ingots produced at a lower cost than from any other mines in existence. The mineral wealth of Isle Royal has been favourably noticed by a cotemporary in an article which we reproduce, and commend the property as a most desirable investment:—

Lake Superior has been long and deservedly famed for its copper produce, native copper—the richest natural form assumed by this mineral—being found in abundance in its mines. Indeed, the most remarkable masses of native copper hitherto discovered are those found in the mines of Lake Superior, some of which have exceeded 150 tons in weight. The subject of the copper yield of the State of Michigan is not a new one, having been variously treated as a whole by scientific explorers. Yet the progress of mining enterprise has opened up some new features which have not as yet received any notice, but which are of equal interest and importance to the producers and consumers of copper in our own land. The copper mining district of Michigan is situated in the upper peninsula or north-western portion of that State, forming a narrow belt of country about 140 miles in length, extending in a north-easterly and easterly direction from the boundary of the State of Wisconsin to the end of Keweenaw Point, the promontory of which projects into Lake Superior on the southern shore, about midway between Fond du Lac and the outlet of the lake at Sault S. Marie. Among the three classes of deposits in which the mines are worked the most important are the stratified amygdaloids, which are confined to the district of which Portage Lake (an inlet which nearly cuts the peninsula into two parts) is the centre. The oldest mines are on the southern side of the lake, while the newer and more important ones are on the northern side. The banks on the lake on either side rise steeply from the water to a height of from 400 ft. to 600 ft.; the dressing-flows, being placed close to the water, receive the ores from the mines (which are located on the high table-lands above) by means of railways and inclined planes. The second or Pewabic group is more important than the preceding, and includes several belts or lodes. The most important members of this series are the highest or Pewabic lode, and the lowest or Albany and Boston conglomerate. The former is a dark brownish-red amygdaloid, filled with small vesicles containing chlorate and native copper. The thickness varies from 6 ft. to 30 ft., the average being about 10 ft. The hanging-wall is a compact greenstone-like trap, while the footwall is a dark amygdaloid, with very small kernels of chlorite. The Albany and Boston conglomerate is a deposit of considerable interest, as it forms a well-marked horizon in the rocks of the Portage district, and carries in places a very considerable amount of copper. It is about 30 ft. or 32 ft. in thickness, and is included between a soft argillaceous sandstone floor, 4 ft. thick and a clay roof of 9 in. in thickness. The latter contains at times parallel sheets of copper, and is locally known as the "flookan lode." The pebbles are chiefly of red jaspideous porphyry, and are for the most part well rounded, varying in size from about half an inch up to 6 or 8 inches in greatest diameter. The cementing material varies considerably, being mainly calcareous at the Pewabic, and a compact epidote at Rhode Island Mine. The more usual character, however, is a granular mixture of epidote, quartz, and finely divided rock-matter, with small specks of copper. More remarkable conditions, however, have been observed in some portions of this rock at the Albany and Boston Mine, where the cement is in places entirely metallic, the copper forming closely fitting shells over the pebbles, and at times permeating them to such an extent as to form, with the siliceous mass, a kind of copper concrete, which, of course, is extraordinarily tough, such pebbles being capable of passing almost unaltered in form through the jaws of the powerful rock-breakers employed on the dressing-floors. In places, however, the copper in the cement of the coarse conglomerate has been changed to chrysocolla and red copper ore, both of the octahedral and fibrous forms, associated with which are calcspar, prehnite, and, probably, cupreous alophane. Out of the total thickness of 32 ft. only the lower portion of the bed, from 10 ft. to 15 ft. in thickness, is cupriferous; so that in this respect the conglomerate resembles the amygdaloids. The lower metalliferous, or Isle Royale series, is a belt of amygdaloids, similar in general particulars to those of the Pewabic group. It includes two great lodes—the Grand Portage, worked in the mine of the same name on the south shore of Portage Lake, and the Isle Royale, which is opened on the Huron Mine, also on the south side, but has also been traced for several miles on the north shore. It is a pale-green amygdaloid, containing quartz, steatite, chlorite, epidote, and copper in small quantity, from 24 ft. to 33 ft. in thickness, yielding about 1 per cent. of copper when dressed. Below the Isle Royale is another lode, called Mabb's Lode, which has recently been discovered; and it is not quite certain whether it be a parallel belt or an actual fissure vein, as its dip is much steeper, being 75° instead of from 52° to 60°, which is the amount of inclination of the higher belts.

So far the peculiarities of the country and the main characteristics of the deposits. We will now proceed to the more detailed notice of Isle Royale, which is an island literally teeming with copper, and lying in the north-western part of Lake Superior, just opposite to Keeweenaw Point. The course of the island is north-east and south-west; it is about 45 miles long by 7 miles wide, and contains about 150,000 acres, of which about 80,000 acres are about to be purchased by a company for practical working. Copper mining is carried on in the United States under highly favourable conditions, the laws of the States having relieved the copper mines from all internal revenue taxation. Beyond this there is an Act now before the Congress, and which has already passed the House of Representatives, which protects the products of these mines by a duty on imported ingot copper of 5 cents per pound, equal to 25*l*. per ton. The copper from the Isle Royale Mines is transported to the smelting works at Detroit with regularity and economy by a large number of steam vessels specially built for that service. The geological formation of the island, as well as its mineralogical characteristics, are identical with those on Keweenaw Point, the great copper region of Lake Superior. Indeed, the similarity is so striking that the island is called the counterpart of Keweenaw Point. They are evidently contemporaneous; on both the lines of stratification are nearly parallel, have the same structure, and yield the same metallic products. Some years since mining operations were carried on at various parts of the island, but the works were abandoned for want of mining skill and experience. There are also the remains of ancient workings on the island, in which are found stone hammers and other rude implements by which the ore-getting was effected. These workings are of very ancient date, and bear evidence of having been performed by an aboriginal race, far superior in intelligence and of industrious habits than the present races of North American Indians. There is ample geological and other evidence that Isle Royal is a mineral territory of immense value, and offers great inducements for the employment of capital. It is admirably situated for mining purposes, having numerous harbours, which afford ready means for delivering supplies and shipping its products. There is a plentiful supply of timber, and the streams which flow from the inland lakes afford abundant power for driving machinery.

Having presented reasonable evidence of the existence of vast deposits of copper on Isle Royale, gathered from geological reports and other reliable data, and having seen also the accessibility and favourable situation of the island for mining purposes, let us revert in passing to its value. To ascertain this we have only to notice the results already obtained by the working of similar courses of copper on the southern shore of Lake Superior. Here, within the past eight years three mining companies, working on the Pewabic lode—the character of which we have already described—have extracted 18,915 tons of copper from less than 6000 ft. of continuous length of the lode. If, then, such returns are obtained from 6000 ft. of one vein, we may expect to see Isle Royal flourish indeed when its resources are fully developed. Here there are a number of veins running parallel to each other, and presenting an aggregate of many miles. We must not be understood as advancing for Isle Royale the claim of being a new discovery, for it is not one. But it presents a new and important field for mining enterprise, and one which must surely and amply repay the judicious application of capital. When this is effected, and if the evidence of eminent geologists and practical miners goes for anything, Isle Royale must take one of the first positions amongst the copper-yielding localities of Lake Superior.

NEW PROCESS OF SMELTING.

Hitherto the utmost that has been aimed at in designing a smelting process has been to extract some given metal in a ready and economic manner, and when an ore has contained some other substance of commercial value it has been customary to make its extraction the subject of a separate process; but it is now proposed at once to utilise whatever valuable substance in the shape of metal an ore may contain. In a communication to the *American Journal of Mining*, Mr. Frank H. Fletcher, of St. Louis, Mo., describes the process invented by Mr. Spencer, which cannot fail to be of very general interest to the readers of the Journal. He says—

"I presume that many of your readers will be interested in the result of the efforts which have been made by Mr. Robert Spencer, in this city, to construct a furnace which should reduce the various ores of this State more economically and more perfectly than can be done by the methods now in use, and they will, doubtless, be glad to congratulate him on the splendid success he has attained. His aim has been to extract and save the entire metallic compounds of the ores treated, and to enable the practical smelter to attain in his furnace the complete results reached by the analytical chemist in his laboratory. By the introduction of a new principle, he has endeavoured to accomplish this at less expense for fuel. Mr. Spencer is from Brooklyn, New York, and is the original inventor of the Spencer process for disintegrating and desulphurising the ores of precious metals, as they come from the mines. He does this without first crushing the ores. He is also the inventor of the process for amalgamating gold and silver by the vapour of mercury. Mr. Spencer's efforts here have thus far been confined to the reduction of galena, which is the most abundant ore of lead in this State. By the furnaces now used here, considerable loss is experienced both from the escape of the volatile particles, in the form of white fumes or lead ashes, that are seen pouring out from the chimney flues, and also from the waste of the sulphur of the ore, which, by burning, is converted into sulphurous acid gas, and passes off with the smoke. By Mr. Spencer's process, there is no such loss. The construction of his furnace is peculiar. The furnace proper is built of common bricks and lined with fire-brick, the outside having an armour of iron to prevent expansion. It resembles one form of the reverberatory furnace known as the Drummond Furnace. It is shaped like the letter L—the fire-place being at one end and at right angles to the oven. The inside dimensions of the oven are—length, 11 feet 6 inches; width, 4 feet; height, 14 in. The dimensions of the fire-place—length, 8 feet; width, 4 ft.; height of fire-bridge from bars, 6 in. The fire-place has one door. The oven has two—one at the upper end to supply ore to the furnace, and one at the lower end to work the charge and furnish an outlet for the metal. The bottom of the oven has a pitch of 20 in. from door to door. To prevent the loss by the open chimney in common use, Mr. Spencer employs a smoke-stack of boiler iron, which conducts all fumes and volatile particles into water, contained in a tank or condenser. This process is aided by a spray of water falling down the smoke-stack, where it turns and enters the condenser. Another pipe discharges the smoke from this tank into the outer air after the water has robbed it of all its valuable properties. A jet of steam discharges into this pipe, creating a vacuum, and giving the necessary draft. This steam is generated in a boiler, the flue of which is the smoke-stack. A cistern overhead supplies the boiler with water through an injection. The steam is superheated in a coil of pipes underneath the boiler and immediately over the furnace. From these pipes superheated steam is passed through a flue on the top of the furnace, and is conducted underneath the grate-bars—the ash-pits of this furnace being closed. With this steam there is carried a current of heated air to a chamber outside the boiler, which chamber is supplied with air by two funnels. The superheated steam and heated air, mingling with the gases evolved by the fuel, create an intense heat, and, at the same time, operate upon the sulphur in the ore of the charge, effecting a more rapid and more perfect reduction. This mixture of oxygen and hydrogen is an attempt at the practical application, on a large scales, of the principal of the compound blow-pipe.

The smelters employed at this furnace were men experienced in the business, having smelted at all of the principal and many of the smaller mines in the State; and, in speaking of this furnace, they unhesitatingly gave it as their opinion that it was superior to any furnace they had ever seen. They assured me that by the Spencer process, with less labour and less fuel, they could make lead faster and could extract more metal from the ore than could be done by any method heretofore employed. At the same time, the lead produced is very soft, and fully equal in quality to any made. They informed me that the condenser worked admirably. The draft was not impaired. No fumes escape from the furnace. Nothing but steam passed from the discharge pipe during the process of smelting. They estimated the saving effect to be fully 50 per cent. They were unable to account for it, but they stated that they had the greatest amount of heat when the fire was low and the steam high. To quote their own language, "It's no trouble here to fire." They were satisfied that coal was superior to wood as fuel. They were also satisfied that they had used too much, and they were daily diminishing the amount. These men were not accustomed to the use of either coal or steam, and, consequently, could use neither economically. The furnace was new when they took charge of it. Hence it is impossible to make an accurate estimate of the amount of fuel required to smelt a given amount of ore. Having watched the furnace carefully for four days, I am of the opinion that a much greater economy of fuel can be reached as the furnace seasons and the men gain experience, for the smelters informed me that it improved every hour. The last charge, they stated, was 1200 lbs. of mineral, and yielded 14 pigs, of 70 lbs. each, or nearly 82 per cent. of lead. This was accomplished, according to the firemen, with 280 lbs. of coal. An interesting feature in Mr. Spencer's furnace is the cheap and simple method by which he saves all the volatile particles, and retains the noxious fumes. The devices employed for this purpose in Europe are costly, and adapted only to large establishments. Mr. Spencer has placed it within the means of every smelter to accomplish the same results as are obtained there. This furnace has been running night and day for more than two weeks. During this time it has been visited by gentlemen representing the principal mining and smelting interests in this State, and, so far as I can learn, they have all expressed themselves satisfied of its success. A portion of the contents of the condenser was submitted to Enno Sander, analytical chemist of this city, for analysis. The value of the savings by this portion of the apparatus he estimates at $2·30 per 100 lbs. of ore smelted, which, in a furnace of this capacity, amounts to $115 per day.

FRANK H. FLETCHER."

COMMERCIAL MIDDLE MEN.—It notoriously takes a long time to introduce mechanical novelties, however intrinsically valuable, to the favourable notice of farmers. It requires well-informed agents, possessed of tact, patience, and generally of superior business capabilities to do so, and even these commonly find the task a long and arduous one, and of necessity costly. A co-operative association has been formed to sell farm machinery to farmers at wholesale prices, and we observe that Messrs. Howard, of Bedford, have, and we think justly, declined to sell their goods at all for this purpose, whereby a hard-working and deserving class of middle men, to whom the trade in agricultural machinery really owes so much, would be displaced. Were it likely that the number of farmers ordering direct would be considerable, or approaching those who now buy from agents and travellers, the co-operative society would deserve encouragement, but it is practically certain that but a comparatively small number would avail themselves of this means of lessening the cost of the machinery and implements bought by them. Indeed, a much less number than at present would buy at all, in the case of many of the more novel implements. —*Engineering.*

MINING NOTABILIA.

[EXTRACTS FROM OUR CORRESPONDENCE.]

At the WEST BASSET meeting, on Wednesday, a long discussion took place between Mr. Pryor, the Chairman (Mr. Bushel), and the solicitor (Mr. Finch), as regards the painful lawsuit between South Frances and that mine, in which Mr. Pryor strongly urged the speedy and fair settlement of the question, which he says reflects anything but credit on the county. He also said he did not see much benefit to be derived from its continuation, especially as regards himself, having an interest in both mines. Mr. Pryor was very warm on the subject, and will, without the slightest hesitation, introduce the matter in a similar way at the next South Frances meeting, being determined, if it is in his power to avoid it, that no man shall spend his money for the gratification and benefit of the few, to the prejudice of himself and the many.

GREAT WHEAL VOR.—The sinking of Ivey's shaft has been resumed. The lode looks well, and is worth 100*l*. per fm. The western end is improving. The end driving east and west in the 194, from Ivey's shaft, holds on, worth 50*l*. per fm.—a fine strong lode. The ends driving west of Ivey's have improved. The mine generally continues to look well, and maintains its returns.

NORTH WHEAL CHIVERTON.—The progress in sinking the engine-shaft is most satisfactory. Every effort is being made to accomplish the sinking to the 100 within the period first stated.

MINING IN PLYNLIMMON.—Amid the seeming decline of mining in the counties of Devon and Cornwall, it affords some satisfaction to those who have the interest of the country at heart to know that new districts are opening up in the favoured county of Cardigan, which bid fair to offer ere long ample employment to the mining population, and profitable investment for capital. The locality to which we more particularly allude is that of the above range, where one rich mine has already been laid open, and where good profits are being realised. Within the last few weeks the same lode has been discovered further west, presenting indications of the highest character; and it is cheering to know that several parallel lodes have been laid open, bearing lead to the very surface. The mineral conditions of this district are of the highest order, and those who have spare cash to invest in mining should keep their eye on this favoured spot, which has within the last few days been examined by that eminent mining engineer, Mr. J. H. Hitchins, whose favourable opinion thereof will, doubtless, be manifest ere long by his directing capital thitherward for its development.

SOUTH CONDURROW—APATHY IN SPECULATION.—As an instance of the extraordinary flatness of business in the Mining Market, and the great disinclination of the public to do business in mining shares at the present time, I would just refer to South Condurrow shares. In the Journal of April 13 appeared a report of this mine of a most unsatisfactory character, yet the following week shares were 15*s*. to 20*s*. The report on South Condurrow Mine in last week's Journal is of the most cheering character, as it is there shown that a goodly quantity of ore was sold at the high price of 9*l*. 7*s*. 6*d*. per ton, and a bright prospect of much larger returns; yet, with such a good report, shares were flat in the market this week at 12*s*. 6*d*.—a ridiculously low price, taking into consideration the local position and the intrinsic merits of the mine. This is but one out of many instances I could adduce of the same character, affording a strong proof of the extreme unwillingness of the public to invest in shares, even when they may get 25*s*. or 30*s*. worth for 1*l*.—AN OBSERVER.

EAST WHEAL ROSE CONSOLIDATED.—A sample of ore from this mine, assayed for lead and silver by Messrs. Johnson and Son, gave—lead, by smelters' method, 79 per cent.; silver, 15 ozs. 15 dwts. per ton of 20 cwts.

GREAT MONA MINE (Isle of Man).—This property appears to be rapidly rising in public estimation, and is known now, beyond a doubt, to be very valuable. It is bearing out the facts already proved by its rich neighbour (the Great Laxey) that depth is all that is required to make it a lasting dividend-paying mine. The machinery erected thereon is of the most substantial character, and works admirably. The shaft is being sunk on the lode, which is exceedingly well defined, and intermixed with lead, copper, and blende. According to Capt. J. Trewin's report, a nice rib of lead is coming in on the wall. It is quite bearing out the very favourable opinions expressed by the eminent engineers who visited and inspected it some two years ago, and the more recent opinion expressed by Capt. John Kitto (late of the Great Laxey) that it would become a very productive mine. That Captain J. Trewin entertained a high opinion of the mine (as expressed in all his reports) is proved by his having within the last few days applied for shares in the second issue. This appears to be an undertaking which must result in permanent benefit to the shareholders, and, from all that can be seen, it certainly seems unlikely that the shares will remain long at par, but will command a good premium.

NORTH ROSKEAR.—In addition to the reduction of salaries consented to by the officials, it has been decided to suspend all dinners and such like unnecessary expenses for the present. During this time of severe depression and difficulty this is a very important matter, and one which might be advantageously considered by many a struggling progressive and non-dividend mine; indeed, it has long been the opinion of many that, even at the best of times, the expenses incurred under this head are far greater than they need or ought to be, and it is a question whether in *non-paying* concerns they should not be considerably modified, if not entirely abolished.

CARN BREA.—We really hope that some reform in the working of this mine will be introduced, so as to save it from destruction, which must follow should the present system be adhered to.

WEST ST. IVES.—This mine adjoins the celebrated rich St. Ives Consols, which is situated in one of the richest, if not positively the richest, stanniferous tracts of country in the world, as has been proved by St. Ives Consols itself, as well as by the neighbouring mines, Providence, Wheal Margaret, Wheal Reeth, Balnoon, Wheal Kitty, Lelant Consols, Wheal Mary, Treleyon, Rosewall Hill and Ransom, Carrack Dews, Wheal Margery, Trenwith, and others. Taking its position into consideration, in conjunction with what has already been seen of the lodes and cross-courses, and the easy and inexpensive way in which they are being worked, there is no question but that a good, productive, and lasting mine will be opened at a very small outlay.

THE COAL TRADE IN AUSTRALIA.—Mr. Merewether, the local manager of the Australian Agricultural Company, writes—"The returns for the colliery department of our operations show that during the year 1866 we sold 107,350 tons of large and 24,570 tons of small coal, or, in all, 131,920 tons, which cost, including all charges for the extension and the improvement of the colliery 41,181*l*. 3*s*. 1*d*., or within a fraction of 6*s*. 3*d*. per ton, realising 47,536*l*. 3*s*. 2*d*., or 7*s*. 2¼*d*. per ton, showing a profit of 6355*l*. 1*s*. 1*d*., or 11½*d*. per ton all round. As compared with the operations of the previous year, this shows an increased vend of 19,893 tons, a reduction in the average cost of 3¾*d*. per ton, and a decrease in the average price of 6½*d*. per ton, and in the profit of 2½*d*. per ton. Our own vend is the largest we have ever shown, with the exception of that of 1860, and gives an average weekly sale of 2537 tons, or nearly 400 more than the average of 1865. Large, however, as it was, comparatively speaking, it was far within our capabilities, and we could with ease have shipped another 1000 tons per week. The advertised price of our best coal was 9*s*. per ton in the first three months of the year, but early in April it was reduced to 8*s*. 3*d*. per ton, on a similar reduction being made at the other large collieries. In the course of the next few months attempts were made both by myself and the directors of the Wallsend Company to raise the price to something more like a remunerative rate, but without success, and the selling price remained at 8*s*. 3*d*. until the end of November, when, thanks to the exertions of a gentleman not personally connected with any of the existing companies, the representives of the seven working collieries in the Newcastle district entered into an honourable agreement not to sell best coal during the current year at the staiths or cranes below a certain price, which, in the case of the four principal collieries, was fixed at 9*s*. 3*d*. per ton, and in the case of the other three at 9*s*. 1*d*., 8*s*. 11*d*., and 8*s*. 3*d*. respectively, contracts made prior to the execution of the agreement being, of course, excluded from its operation. This is the nearest approach which has yet been made to anything like an arrangement for upholding the price, and though the agreement is not so complete and binding as I could wish, it will, I trust, be the means of bringing about a better understanding between the coal companies, and eventually lead to a more perfect one.

Since 1836 there have been established throughout the world 160,000 miles of telegraph lines, comprising 400,000 miles of wire, and working through 14,000 stations. The total length of submarine cables laid is 19,923 miles.

Mining Correspondence.

BRITISH MINES.

BEDFORD UNITED.—J. Phillips, July 24: The ends on the north lode are all being driven by the side of the lode. The stopes throughout the mine are without any alteration.

BLACK CRAIG CONSOLIDATED.—J. Smitham, July 25: There is no change in Harriet's shaft, below the 54 fm. level, since my last report. The stope in the bottom of the 54, north-west of Harriet's cross-cut, is producing about 15 cwts. of lead per fathom. The rise in the back of the said level is producing about 20 cwts. of lead per fathom. The stopes in the back of the 54 fm. level, on Harriet's lode, is producing from 12 to 15 cwts. of lead per fathom, and a deal of good saving stuff for blende. This is the lode, and I think it is the same shoot of lead, we had in the south side of the 43 fm. level in cutting the bearer holes. The branches in the 54 fm. level, driving east of No. 2 cross-cut, are producing from 5 to 6 cwts. of lead per fathom, but the ground is hard for driving in. The stope in the back of the 6 fm. level, below the 43, is producing about 15 cwts. of lead per fathom. We sold on Wednesday last 30 tons of lead ore, to Messrs. Walker, Parker, and Co., at 12l. 8s. 6d. per ton.

BRONFLOYD UNITED.—T. Kemp, July 24; The stope west of winze, under the 52, is still looking well, and is worth fully 3 tons of lead ore per cubic fathom. The stope east of the same winze is worth 1½ ton of lead ore per cubic fathom; the lode at this point is intermixed with more blue-stone, and the strings of ore are not quite so large. The new shaft is completed to the 63, and the cross-cut extended south 3 feet towards the lode. We are progressing well towards the next sampling.

BRYN GWYN.—H. Nottingham, July 23: We have a favourable change in driving the lower level south from incline, east of shaft, the ground being much easier for driving, as well as of a more congenial character for lead. I should have suspended the driving of this level after our next setting had not this change have come in, but now I think it most advisable to extend this level to the boundary, should the ground continue favourable for doing so. We cannot find any lead as yet on the east side of this level, but we cannot form a very correct judgment of the ground until we have gone deeper into the flat, and for this purpose we are now going to sink the sump a little deeper, and then drive out. The tributer who is working under the middle of incline, east of shaft, is not so successful as he was last month, the ore ground in that level being exhausted. The tributer who is working in bottom of old incline has a very good pitch at present, but the ground around it is very hard. Those in the upper part of the mine are getting but a small quantity of ore at present.

CAPE CORNWALL.—R. Pryor, W. White, July 24: The lode in the 100, east from shaft, is large, and producing good stones of tin. The lode in the stopes in back of the 90, east and west of rise, is worth 5l. per fathom. The lode in the 70 west is improving, and producing fine stones of copper ore, with every appearance of a further improvement as it gets out of the influence of the east and west lode.

CALDBECK FELLS.—Wm. Francis, July 22: In the 90 west no change has taken place worthy of notice since my last report; the ground continues stiff for progress; driving by four men, at 14l. per fathom. The cross-cut driving north from the 90, on south lode, has intersected a caunter branch of felspar and quartz, but not yet reached the north wall; driving by two men, at 12l. per fathom. The lode in the 90 east, on south lode, is mixed with carbonate and phosphate of lead, but not to value; the end is discharging a strong feed of water; driving by four men, at 2l. 15s. per fathom. We have cut the south part of the caunter lode in the cross-cut driving north from the engine-shaft; the lode is impregnated with lead, and letting out water; it will take 6 or 8 feet more driving before we reach the north side of the lode; driving by six men, at 9l. 10s. per fathom. The lode in the 80 west, on north lode, is worth 6 cwts. of blue lead ore per fathom. The ground in this end has very much changed since my last report, being much harder for progress than I have seen it for some time. I have put the men to drive a little more to the north lode, as I think we shall be able to get clear of the hard bar of ground much quicker than by driving direct on the course of the lode; driving by four men, at 15l., fathom stent. No change in the 10 east, on south lode, worthy of notice since my last report. In the 70 west we have intersected the north lode, worth 6 cwts. of blue ore per fm.; driving by two men, at 11l. per fathom. The stope in back of this level on the north lode is worth 10 cwts. of blue ore per fathom; stoping by four men, at 5l. 10s. per fathom. The lode in the 60 west, on north lode, is looking more favourable, impregnated throughout with spots of blue ore; driving by six men, at 7l. per fathom. The stope in the back of the 60, on the caunter lode, is worth 14 cwts. of blue ore per fathom: stoping by four men, at 4l. 10s. per fathom. The 30 west continues much the same as last reported; driving by six men, at 7l. per fathom. The lode in the intermediate level east, at Mexico, has produced some fine stones of grey ore for the last 5 fms. driven; we may anticipate further improvement in this level, as we are fast approaching the run of ore discovered in the 50 fm. level above; this end is driving by six men, at 3l. per fm. Oate's stope, in back of the 90 west, on caunter lode, is worth 16 cwts. of blue ore per fathom; stoping by four men, at 5l. 5s. per fathom. Moffet's stope, in the back of the 80 fathom level west, is worth 16 cwts. of blue ore per fathom; stoping by two men, at 3l. 15s. per fathom. Strong's stope, in the back of the 80, on the caunter lode, is worth 18 cwts. of blue ore per fathom; stoping by four men, at 4l. 10s. per fathom. W. Peet's stope, in the back of the 90 fathom level west, on caunter lode, is worth 8 cwts. of blue ore per fathom; stoping by two men. at 5l. 10s. per fathom. Brown's stope, in back of the 30, on caunter lode, is worth 18 cwts. of blue and grey lead ore per fathom; stoping by four men, at 4l. per fathom. Macintosh's stope is worth 1 ton 8 cwts. of blue ore per fathom; stoping by six men, at 5l. 5s. per fathom. Ashbridge's stope, in the back of the 30 east, is worth 1 ton 10 cwts. of blue and grey ore per fathom; stoping by four men, at 4l. per fathom. Hewer's stope, in the back of the 30, in old workings, is worth 8 cwts. of blue and grey ore per fathom. The ground in the engine-shaft continues hard for sinking. We have sunk through the caunter lode. The shaft is now in a hard bar of ground, and is down within about 2 fms. of the back of the 90 fm. level cross-cut; we are pushing it on as fast as possible by nine men, at 30l. per fathom for sinking. I may remark that we have commenced to drive the cross-cut in under the shaft, which will take about 9 ft. to drive. After this is done we shall commence to rise up to meet the shaft, in order to get it holed as quickly as possible. We have masons engaged in building the boiler-house, and putting in flues, &c. The timber for the main-rods is on the mine, and also for the balance-bob. Everything connected with the engine will be pushed on as fast as possible. The weather for the past week has been unfavourable for our surface operations. We have nothing fresh at Dry Gill Mine. We have laid a tramroad in the deep level, as the distance was too far to wheel the stuff. This end is now arrived near the junction of the north and south lode. A little south of the junction on the north and south lode a bunch of ore is being driven through in the intermediate level above: in order to prove this bunch of ore, we purpose driving south from the deep level on the course of the north and south lode by two or four men, and the remainder of the men to continue the deep adit west. We have now a good supply of water for our dressing machinery, and hope in about ten days time to be able to sample from 50 to 55 tons of blue and grey ore, exclusive of the lord's dues. We are also preparing a small sample of copper for the market. I am glad to say that the prospects of the mine continue good.

CARADON CONSOLS.—S. Bennetts, July 23: During the past fortnight we have taken down no lode in the 90 west. The ground here appeared as if about to change for the better on one or two occasions, but as yet there is not much alteration. The 80 west is also without alteration; the lode containing a leader of ore from 2 to 4 inches wide—tolerably good work. We have not as yet been able to resume the rise, on account of the bad air. In the other parts of the mine it is improved. No change to notice in the new shaft.

CARDIGANSHIRE LEAD.—E. Pearse, July 25: Glan Rheidol Mine: The lode in the 40, east of north cross-cut, is not so productive at it was, but still yielding good work. In the 40 cross-cut, south of shaft, we have driven through a branch of blende about 4 in. wide, underlying north; the ground in the end is without alteration; I expect the south lode will be intersected some time next month. The lode in the 30, east of shaft, is producing saving work, and likely to improve. The lode in the 30, west of shaft, has improved a little since last report, but is not yielding much ore; looking kindly for further improvements. No. 1 winze is down about 7 fms., and we have 3 fms. more to communicate to the 40; the lode producing saving work. The lode in No. 2 winze, below the 30, looks exceedingly well, worth nearly 2 tons of lead ore per fm., and improving in depth, which speaks well for our 40. The blende is carried down to our stores at Aberystwith, and we are now getting on with a parcel of lead.

CHIVERTON.—J. Juleff, J. Borlase, July 24: Cookney's shaft, sinking below the 110, is in a lode worth 35l. per fm. for length of the shaft. In the 110, east of Cookney's, the lode is 3 feet wide, and worth 12l. per fm. In the 110, west of Cookney's, the lode is 3 feet wide, yielding good stones of silver-lead. The 78 end, east of Murray's, is now holed to the old engine-shaft. The men are now engaged clearing out the old workings with all speed, so as to examine the bottom part of the old mine in the eastern ground. In the 100, east of Murray's, the lode is worth 8l. per fm. The stopes and pitches continue to look well.

CHIVERTON MOOR.—J. Juleff, W. Bennets, July 24: The engine-shaft below the 65 is down 2 fms. In the 65, west of engine-shaft, the lode in the end is 2 ft. wide, and worth 5 cwts. of silver-lead per fm. In the 65, east of engine-shaft, the lode is 2 feet wide, and worth 3 cwts. of lead per fm., with a promising appearance. The winze sinking below the 50, west of the engine-shaft, is down 4½ fms., in a lode worth 10 cwts. of silver-lead per fm. In the 65, east of flat-rod shaft, the lode is at present dead ordered. The rise above the 65, south of flat-rod shaft, is up 3½ fms., in a good-looking clay-slate.

CLARA UNITED.—J. Davis, July 24: The mine is drained to the roof of the 50, and the men have consequently resumed work in the stopes, and in the winze under the 40. There is no alteration in any of these bargains since my last report. We have repaired the crusher, and the work on the dressing-floors is also resumed.

CRELAKE.—W. Skewis, W. Hooper, July 24: In consequence of the men employed to clear and secure the 74 west being ill, little or nothing has been done in it since last report; it will, however, be resumed again in a day or two. The lode in the 62 west is worth 15l. per fathom. The lode in the stope in back of this level is worth 10l. per fathom. The lode in the 50 west is worth 10l. per fm.; and in the stope in back of this level it is worth from 6l. to 7l. per fathom. The 40 west for the last four or five days has been so full of stuff that we have not been able to drive it, nor shall we be able to do so for a few days longer. The lode in the western, or No 2 rise, is worth from 14l. to 15l. per fathom; the stope in the back of this is worth 14l. per fathom. The No. 1 rise, in back of this level, is holed to the 28 fm. level, and as soon as the ground is properly secured, and the lode cut through, the 28 fm. level will be driven forth to the No 2 rise.

CROWAN AND WENDRON.—R. Reynolds, July 23: We are making fair progress with sinking the shaft below the adit; the lode is about 2½ feet wide, producing good work for tin. There is no change to notice in the lode in the winze. We calculate we shall have to sink from 2 to 3 fms. more to meet with the run of tin ground in the shaft.

CUDDRA.—F. Puckey, A. Cundy, July 23: We are making good progress in driving the 142, west of Walker's shaft, in the killas by the side of the lode. Next week we shall commence cutting out the lode at this level, west of the cross-cut, to prove its value. We are urging on the driving of the 130, west of same shaft, by the side of the lode, with all possible speed, to get under the run of tin ground that is gone down below the 100. In cutting out the lode at this level, west of the cross-cut, it is 12 ft. wide, and worth 20l. per fm. In the stope in the back of the 130, east of the winze, the lode is 12 ft. wide, and worth 25l. per fm. for that width. In the stope in the bottom of the 117, west of the winze, the lode is 8 ft. wide, and worth 15l. per fm. The lode in the western stope, in the back of the 100, west of Walker's shaft, is 12 ft. wide, and producing good work for tin, worth for its width (12 ft.) 40l. per fm. In the stope further east the lode is about the same size, composed of quartz, peach, iron, and tin, worth for the latter 15l. per fm. for its width.

DALE.—R. Niness, July 22: The 44 fm. level cross-cut is going through some small veins of spar of an exceedingly promising character; the cross-cut having drained a great deal of ground above this level now enables us to explore ground that we could not do before without the aid of machinery. I have, therefore, put the men that were working in the 32 to sink on the western part of the old Pipe vein in the 37, where, I am glad to say, we have discovered some good ore, which I shall be able to say more about in a post or two.

DALE.—R. Niness, July 25: The ore in the 37, referred to in my last, is on the western part of the old Pipe, and in a continuation of the ground that yielded the principal part of the ore above this level, and is likely to prove as productive as ever.

EAST GUNNISLAKE.—James Phillips, July 25: The different points throughout the mine are looking about the same as when last reported on.

EAST NEPTUNE.—Peter Floyd, July 25: In the 25 fathom level cross-cut, north of Hosking's shaft, the ground still continues favourable for driving, and from present appearances the lode will be intersected in about a fortnight. In the winze sinking below the 15, north of Hosking's shaft, the ground is mineralised, with good branches of grey and red oxide of copper ore dipping towards the lode, which give indications that the lode, when cut, will be found productive.

EAST PROVIDENCE.—J. Nancarrow, W. White, July 22: Boorman's shaft is down 8 fms. below the 94; the ground is rather hard. The lode in the 94 fm. level east is larger, looks better, and is letting out more water than usual. The lode in the 82 east is 1 foot wide, composed chiefly of chlorite. We are making fair progress in the rise above the 70. The lode in the 50 east is 10 inches wide, and is worth 5l. per fathom. The tribute pitches present just the same appearance as at the setting.

EAST ROSEWARNE.—C. Glasson, July 25: There is no change to notice in the lode in King's shaft, sinking below the 95, since my last report. In the 95, west of King's shaft, the lode is producing stones of copper ore, but not enough to value. In the 95, east of King's shaft, the lode is 8 in. wide, worth 4l. per fm.; the lode in the rise in back of this level is still disordered by the slide. In the 85, west of King's shaft, the lode is very much the same as reported last week; 12 in. wide, worth 6l. per fm.

EAST ST. JUST UNITED.—Richard Pryor, R. P. Goldsworthy, R. Wearne, July 24: Eastern Mine—Phillips's Engine-shaft: We shall complete the plunger lift, rods, &c., to the 30 in a few days. The 20 east, on Agaworth lode, is without change.—Western Mine—Saveall's Lode: We have completed the skip-road from the 76 to the 90, and have commenced to drive the 90 fm. level ends, east and west; the lode in the east end is 4 ft. wide, worth 12l. per fathom; the lode in the west end is full 5 ft. wide, worth 15l. per fathom.—Buck Lode: The 62, driving east, is opening tribute ground. We are putting in tramroad in the 40 east; when completed we shall drive the end, and take away a long piece of tin ground in the back advantageously.—Owl Lode: The 40 north, from Reddipper shaft, is without change. This remark will also apply to the 20 north from West Buck shaft. The lode in the 20, south from Saveall's, is poor. The 10, north from West Buck shaft, is worth 7l. per fathom. The 10 north from same shaft, on the branch, is opening tribute ground, and improving. The adit north, from same shaft, is worth 4l. per fathom; here we expect an improvement speedily.—North Lode: The 40 east and 20 east are without change.—Reddipper Lode: The 20 east is opening tribute ground.

EAST WHEAL GRENVILLE.—G. R. Odgers, William Bennetts, July 24: The lode in the engine-shaft sinking below the 95 is 2 feet wide, composed of flookan, quartz, and prian, with a little tin and copper ore—a very kindly lode. The lode in the 95 east is from 1 foot to 15 inches wide, composed of peach and quartz, with a little ore and flookan. We are not yet out of the influence of the cross-course. The lode in the 95 west is from 20 inches to 2 feet wide, and worth 2 tons of copper ore to the fathom—a most promising lode. The lode in the stope above the 95 is worth 2½ tons of copper ore to the fathom. The lode in the 75 east continues small. There is no lode yet seen in the 75 cross-cut south, on the cross-course, but which cannot be far off.

EAST WHEAL ROSE CONSOLS.—J. Thomas, July 24: The adit level has been extended about 55 fms. west on the course of the lode, and a shaft (which is 4½ fms. deep for surface) sunk for ventilation, drawing stuff through, &c. The lode has been nearly for the whole drivage in a very disordered state, owing to the unsettled state of the stratum, but I am very pleased to say the lode and stratum for the last 3 fms. driving have undergone a considerable change for the better. The stratum is more settled, and the lode more defined, and in the present end the lode is about 2½ ft. wide, composed of killas, flookan, friable spar, impregnated with lead and copper, and I should remark that this lode is as fine and promising a lode as can be seen in the district for the depth. In the old shaft, which has been re-opened near the eastern boundary, I have discovered the lode is home against the elvan, which has had a most favourable influence, as you will perceive by the box of lead stuff which I sent you by this mail; the lode is about 4½ ft. wide, and composed of killas, flookan, soft spar, and lead. In conclusion, I beg to say I have the greatest confidence we shall have a good mine, as the indications at present are of such a nature as to warrant it. The adit end is being pushed on day and night with all dispatch, to get west under where we discovered lead in costeaning, and I think when we reach that point we shall meet with something good.

FURSDON.—J. Collins, July 25: The lode in the adit west is being worked 4 fms. below the level, worth about 20l. per fm. The cross-cut north in the 11 east is being driven only 1 ft., and without change. The stopes in the 11 and 21 not being taken, we have put those two men to raise a little ore for this month's sampling; but the men who engaged to work did not take the stopes; therefore, our sampling is very small for this month, but the ore of much better quality than the last sold. We expect to sample to-morrow 16 tons. We have four men to put to work to-day—two men in the 21 and two men in the 11 fm. level stopes. We expect two men more in a day or two to put in the stopes in the 11 east.

GAWTON COPPER.—G. Rowe, G. Rowe, jun., July 20: The ground in the 70 fm. level cross-cut is exceedingly favourable, and our progress in extending the level towards the lode is very satisfactory. The lode in the 60, east from cross-cut, is 5 ft. wide, carrying a small lode of rich copper ore on the footwall, which indicates a further improvement in no great distance further driving. The lode in the 60 west is showing a very kindly appearance, yielding 4 tons of ore per fathom, and is, in all probability, opening out a new shoot of ore in this direction, which will greatly enhance the value of the mine. The lode in the stopes in the back of this level is worth 4 tons of ore per fathom. No. 2 stope, in the back of the same level east, is worth 5 tons of ore per fathom. The lode in the stope in back of the 50, east of cross-cut, is worth 3 tons of ore per fathom. The lode in the stope in back of the same level, west from Moor's winze, is worth 10 tons of ore per fathom. The lode in the rise in back of the 50, west from old sump, is worth 4 tons of ore per fathom. During the past week this property has been thoroughly inspected by three highly respectable and disinterested mine agents, who express themselves in the highest terms relative to the present position and future prospects of the mine, which is resolving itself into a dividend condition.

GLASGOW CARADON.—Wm. Taylor, July 23: From the appearance of the 78 west I think we shall get a change before long; the lode is turning more to the south, and showing a better appearance. In the 65 west we have not taken down much of the lode for the week; we find the granite by the side speedier for driving on than the lode; from all we can see of it, it is of just the same value as last reported, worth 10l. per fathom. No change of importance to notice in the stopes this week. In the 65 cross-cut south we have not yet reached the lode; the ground is very favourable, and letting out a good deal of water. As near as we can calculate the underlie of the lode seen in the 52, we must now be close to it at this level. Everything is being pushed on as fast as possible.

GREAT MONA.—John Trewin, July 17: The lode at the engine-shaft is again improved; it is now over 7 ft. wide, with good stones of blende, lead, and copper ore, and is greatly improved in appearance since my last report; indeed, it looks very encouraging, and is likely to lead to very good results.

GREAT NORTH DOWNS.—W. Rich, C. Bawden, July 24: The lode in Sleggan's shaft, sinking below the 86, is improving, now worth 25l. per fm. for the length of the shaft, 14 feet. The 86, east of Sleggan's, is worth 12l. per fm. The 86 west is worth 30l. per fm. We have holed the rise in back of the 86, between the No. 2 winze and Sleggan's shaft, which has laid open valuable ground for stoping, worth 18l. per fm.; the stope east of the No. 2 winze is worth 16l. per fm. The back of the 86, west of King's, is worth 10l. per fm. The 70 end west is worth 5l. per fm.; two stopes in back of the 70 are worth 20l. per fm. Butler's shaft is worth 15l. per fm.

GREAT RETALLACK.—G. R. Odgers, J. Harris, July 24: The ground in No. 1 shaft continues of the same favourable kind for lead that we described at the meeting. The men have nearly completed the plat at No. 2 shaft. In the 20 north the eastern and western parts are approaching each other rapidly, each part producing silver-lead, and we are strongly of the opinion that at the junction, which will take place in 9 feet more driving, a bunch of lead is very likely to be found. The lode in the 10 south has undergone a great change; it is 18 in. wide, of friable quartz and good silver-lead, letting out a stream of water; here we are also expecting an improvement. The lode in the winze sinking below the 10 will produce from 4 to 5 cwts of lead to the fathom. The 10 north is producing good stones of silver-lead. The stopes above this level will produce 7 cwts. of good silver-lead to the fathom.

GREAT SOUTH CHIVERTON.—J. Nancarrow, J. George, July 19: The lode in Gifford's engine-shaft is 7 ft. wide, contains a great deal of carbonate of lime aed flookan, mixed with mundic, and has altogether a very fine appearance. The south lode in the 30 west is 2 ft. wide, composed chiefly of flookan and carbonate of lime. The north lode in the 30 looks better for lead, and there is a leader of mundic in the end 6 in. wide. The copper ore continues in the winze below the 20, and there is more lead; this lead does not appear to be reached.

GREAT SOUTH TOLGUS.—J. Daw, July 24: In the past week we have sent down the lift from the 112 to the 125 fm. level, and at this time the water is 12 ft. below the 112 fm. level, and if everything works well I hope to redeem the plunger lift at the 125 fm. level in about a week or ten days. Seeing by Mr. Pryor's report that the engine is not working more than 7½ ft. stroke, I have this morning measured it, and the engine is working close on 8¼-ft. stroke.—P.S. I have to-day sent men to South Tolgus, to see if the water is going down in that mine, and it is now about 8½ fms. below the adit level.

GREAT WHEAL BADDERN.—R. Pryor, H. Tregoning, July 20: We have set the following bargains to-day:—The 75 cross-cut to drive south of Hill Brothers engine-shaft by six men, at 16l. per fm.; the end is still in the elvan course, and is hard and wet. The 75 to drive west of cross-cut by six men, at 7l. per fm.; the lode is much larger than we have seen it for some time past; it is now full 3 ft. wide, composed principally of mundic, flookan, with spots of silver-lead, and an increased quantity of water, which is coming from the western mine.

GWYDYR PARK.—Wm. Smyth, July 23: Since my last report, we kept the water out till last Saturday, and have worked a little in different parts of the old workings, and I am of opinion that I then rather underrated the value; still I do not see that it is possible to keep out the water now the rain has set in, and, therefore, have put six men in the deep adit, in which we have about 12 fms, more to drive, and by the appearance of the lode in the old workings it is more than possible that the adit will drain them, when we shall be able to sink and stope without any machinery, and take all the lead ore, &c., by the tram-road in the adit to the base of the hill to dress, where carts can come without the least difficulty. The lode in the deep adit is becoming easier to drive, and I expect we shall have a further change for the better shortly, from present appearances.

HARWOOD.—Joseph Race, July 20: There is no alteration to note in the end of the level going north since my last report. The stopes are about as last reported. We are now going to rise into the limestone from the cross-cut we have been driving south. We weighed the ore off yesterday—24 tons, 20 tons to market and 4 tons duty.

HINGSTON DOWN CONSOLS.—T. Richards, July 24: The 140 fm. level, east of Bailey's engine-shaft, is worth 35l. per fathom. The stope in the bottom of the 130 fm. level, west of the cross-course, is worth 30l. per fathom; east of the cross-course is worth 40l. per fathom. The stope in the back of the level is worth 25l. per fathom. The stope in the bottom of the 130 fm. level west is worth 15l. per fathom. The stopes in the back of this level are worth 20l. per fathom. The stopes in the back and bottom of the 120 fm. level east are worth on the average 20l. per fathom. The stope in the back of the 120 fm. level west is worth 18l. per fathom.

LADY BERTHA.—F. C. Harper, J. Metherell, July 25: I do not know that I have anything of importance to inform you. You are, of course, aware that no work is being done in the shape of driving or stoping just now, the wheel and machinery are in good working order, and the mine is in fork to the 41. We shall be very glad to have instructions to commence operations again in earnest shortly, believing, as I have before informed you, that in this and the Last Bertha sett there is every chance of ultimate success.

MARKE VALLEY.—J. Truscott, July 23: The ground in Salisbury shaft, sinking below the 124, continues without alteration. Marke's lode, in the 118 east, is producing 2 tons of copper ore per fm.; west, at the same level, it is producing 1 ton of copper ore per fm. The 100 west is producing 1 ton of copper ore per fm.—Rosedown Lode: The 90 west is producing 1 ton per fm.; the 80 west is producing 1 ton per fm.; the 70 west is producing 3 tons per fm.; the 60 west is producing 2 tons per fm.; the 50 west is producing 5 tons per fm.; the 40 east is producing 4 tons per fm.

MINERA UNION.—W. J. Harris, July 25: Brabner's Shaft: The lode in the 60 north is the same as last reported; the lode in the rise in back of this level is worth 8 cwts. of lead per fathom. The pitch in bottom of this level yields good stones of ore. The pitch in bottom of the 80 yard level south is worth 10 cwts. of lead per fathom.—Boundry Shaft: The pitch in bottom of the 60 yard level is worth 8 cwts. of lead per fm. The pitch on said lode, in the 50 yard level, is worth 10 cwts. of lead per fm. The pitch in back of the 40 is worth 5 cwts. of lead per fathom.—William's Shaft: The lode in the 40 yard level north yields lead in irregular quantities—on an average about 8 cwts. per fathom.

NETHER HEARTH.—Wm. Vipond, July 20: We have the west stope rather poorer at the end of this week, but I think it will be as good as usual in a few days. There is nothing particular to notice in the other places. We have 4 tons of ore dressed.

NEW CROW HILL.—W. Trelease, July 23: The 70, east of engine-shaft, is without change in the lode, but the ground is a little stiffer. In the new winze, below the 55, the lode is 5 ft. wide, yielding some good orey stones, but not to value. The old No. 1 stope, over the 35 east, is still worth 12 to 15 cwts. of lead ore per fathom. The new stope is worth now and then 5 to 6 cwts.; ground harder. At Louisa's we find more of the lode in the extension of the cross-cut from bottom, or it may be a distinct lode; it is very wet and mundicky, with plenty of jack, with spots of lead ore, which is all I can as yet state of it, having had but one taking hole blasted in it. I shall be able to state more in next week's report. The lode we are driving east on is still producing occasional stones of ore.

NEW TRELAWNY.—E. H. Dingle, July 24: The engine-shaft sinking on the course of the lode is down 5 fathoms 3 feet below the 30, sinking in a beautiful channel of mineralised killas, 10 fms. stent, at per contract 120l., or 12l. per fm.; the lode is 2 ft. wide, composed of mundic, quartz, prian, and peach, with good stones of rich black and yellow copper ore; a lode of greater promise cannot be seen, and I fully expect an early improvement here. The lode in the 30 east has a very improved appearance, and is letting out a good deal of water; the lode is 1 foot 6 inches wide, being composed chiefly of mundic, with stones of copper, and will yield 2¼ tons of mundic per fathom, worth 2l. 10s. per fathom. In the 30, west of shaft, the lode is 4 ft. wide, composed of mundic, quartz, peach, and prian, spotted with copper ore—a strong masterly lode, and when last taken down would yield 2 tons of mundic to the fathom, worth 2l. per fathom. In this end we fully expect an improvement, as we have been driving through a piece of disturbed ground, caused by the influence of a lead branch crossing the copper lode, of which you were duly advised. In the stope in back of the 30, west of shaft, the lode is from 1½ to 2 ft. wide, composed of mundic, quarts, peach, and prian, containing good stones of rich black and yellow copper ore, and is worth for mundic and copper 4l. 10s. per fathom; stoping at 1l. 5s. per fathom. In conclusion, I have much pleasure in saying that the mine never held forth greater promises of success than at present. We are getting on with the dressing as fast as possible. The engine and pitwork are in good trim.

NORTH DOWNS.—Francis Pryor, John Grenfell, July 20: The 70 to drive east of Bennetts's shaft, by six men, at 10l. per fathom; it is still in the elvan, and not to value. A winze to sink below the 60, and in advance of the end about 4 fathoms; the lode is poor; this winze is in the killas, but we expect to reach the elvan shortly; price for sinking, 5l. 10s. per fathom—at this time unproductive. A cross-cut to drive south at this point, in the 40, to intersect the south lode, east of Bennetts's cross-course, at 2l. per fathom. The 50 to drive west of King's shaft, on the south part of the lode; this end has improved in appearance, and we look forward for a change for the better shortly; price for driving, 2l. 10s. per fathom. A cross-cut to drive south in this level. The 60 to cut the south lode, at 6l. per fathom. In driving about 3 fathoms more we expect to intersect the lode. We are driving in the 55, east of rise, on the south part of the lode, by six men, at 6l. per fathom, worth full 10l. per fathom. The same level, driving west of winze, by six men, at 5l. per fathom, worth full 8l. per fathom. There is nothing new in any other part of the mine. We have now ready for sampling, on Tuesday next, 41 tons of ore, for three months; and we see no reason why we shall not sample, at our usual two-monthly sampling, 60 tons of superior quality ore. We may mention that of the ore now ready for sampling, 20 tons were raised in sinking and driving, thus proving our former reports not to be over-rated. It is our opinion that, in continuing our usual mode of working the mine—that is, making ourselves satisfied that certain points laid before you are worthy of pursuing, and accomplishing the same with as little delay as possible, having due regard to economy, that better days are before us.

NORTH PHŒNIX.—J. Seccombe, John Martin, July 19: The 140 to drive west in the killas by the side of the lode by six men, at 10l. per fathom; the ground continues favourable, and the wall of the lode is showing a good deal of mundic, spotted with copper ores. The 140 to drive west, on the south side of the lode, by six men, at 6l. per fathom; there is no change to notice in the ground. The lode is bearing a little more north than it has been, which we consider a good indication. To drive the No. 4 cross-cut north from the 140 west by four men, at 16l. per fathom. We have not as yet reached the leading part of the lode, but expect to do so very soon.

OKEL TOR.—J. Rodda, July 25: The south lode in the 80 fm. level east is 3 ft. wide, and composed of spar, white iron, mundic, and stones of ore occasionally. The lode in the 50 east is very large, and consisting principally of capel, spar, mundic, and ore, and looking very promising to improve. Hole's winze, in the bottom of this level, continues to produce 5 tons of ore per fathom. Geake's stope in the back of the 50, west of Bickle's cross-cut, will yield 3 tons of ore per fathom.—North Lode: Bates' stope, in the back of the 80 fm. level east, will yield 4 tons, and Reynolds's stope 3½ tons of ore per fathom. The lode in the 65 fm. level east is looking very promising indeed, and rapid progress is being made in the driving. Oliver's stope, in the back of this level, will yield 3 tons of ore per fathom, Wilton's stope 2 tons, Williams's from 3 to 4 tons, and Tregoning's 2½ tons of ore per fm. All the machinery is working well.

OLD WESTMINSTER.—F. Evans, July 24: No particular change has occurred in the 92 east since last report, but appearances are very encouraging; we are still cross-cutting the lode in the 92 west, which is very promising, composed of spar, with grey and white ore, and occasional solid stones of blue lead; we are in it 9 feet, and no hanging wall yet; strong water is issuing from it, which is a most favourable indication.

PEDN-AN-DREA UNITED.—W. Tregay, J. Thomas, E. Chegwin, July 20: Sump: The progress made in driving the 140 fm. level north cross-cut is fair; ground rather improved. In the 130 east the lode promises improvement, now worth 4l. per fathom. The lode in the 130 fm. level winze is worth 14l. per fm. The lode in the 130 west winze is worth 12l. per fathom, for 6 ft. wide, and no south wall. The 120 fm. level west rise has been communicated with Cobbler's shaft, and the men are now cutting it down, ready for skip-road to the 130 fm. level. The lode in the 100 east is still disordered by granite, worth 4l. per fm.—Cobbler's: This shaft is now being communicated with the 120 fm. level. We expect to open up the ground in this direction under the productive lode at the 110 very rapidly, and hope thereby to increase our production. The 110 east is worth 8l. per fathom. The 110 west is worth 12l. per fathom, for 6 ft. wide, and no south wall. In the 90 north nothing of consequence has been intersected; there is much water still flowing from the end. In the 90 fm. level, west of cross-course, the lode has not been taken down for the week, and, therefore, remains of the same value as last reported—8l. per fathom, and promising improvement.

PENHALE WHEAL VOR.—R. Northey, July 22: I have carefully inspected this mine, both at surface and underground, and find that the sett or mineral ground is very extensive, and situated in one of the best tin districts in Cornwall, embracing several lodes, but only two of known value have been wrought on to any extent, the same having produced very large quantities of tin. Sanford's engine-shaft is sunk about 6 fms. below the 84, on the course of the lode, the same being about 2 ft. wide, producing stones of tin. In the 84 a cross-cut has been driven about 10 fms. north of Sanford's shaft, to intersect the Parkwarrah lode, and it is expected, according to the dip or underlie of this lode, to reach this point in about 2 fathoms more; this work I should recommend being pushed with all possible force, the lode having produced large quantities of tin in the upper levels, and I see no reason why it should not prove as productive at this point. In the 74 a cross-cut has been driven south of Hollingsworth's shaft about 43 fms., to intersect Penhale lode; this is a very interesting point to come off, which is expected daily, and which will, in all probability, prove an important and telling point for the future development of the mine. In the 38 a cross-cut has been driven about 6 fms. 3 ft. south of Battye's shaft, intersecting the south lode; the level driven east on its course about 8 fms.; lode 15 in. wide, worth 8l. per fm. In the 26 a cross-cut has been driven south of Battye's shaft about 10 fms., intersecting the south lode, which is about 18 in. wide; the level driven on its course about 16 fms., at present worth 12l. per fm., and improving as they drive eastward. The stopes throughout the mine are worth on an average about 8l. 10s. per fm.; in the present prospects you may calculate to return fully 6 tons of tin per month, and in a short time you will be in a position to employ more men, in ground which must greatly increase your monthly returns. There are other points of very considerable importance, which, on an outlay of capital, would, in my opinion, be developed to a very successful issue. Being a matter of capital I leave it to your consideration. I have only to add, I have met with every assistance necessary through your agents, and can only report most favourably of the condition of the mine throughout, both at surface and underneath your machinery and dressing-floors are all highly satisfactory.

PENHALE WHEAL VOR.—W. H. Martin, July 23: The lode at Sanford's shaft, sinking below the 84, is much the same as last advised. We have resumed driving the cross-cut north in the 84, to cut the Parkwarrah main lode.—South Lode: The lode in the 38, east of cross-cut from Battye's shaft, is 1 ft. wide, worth 8l. per fm. The lode in the 26 east is 2 ft. wide, worth 8l. per fm. The lode in the stope in bottom of the 26 is 16 in. wide, worth 6l. per fm. In the stope in back of the 26 the lode is 18 in. wide, and worth 10l. per fm. We are continuing the cross-cut south in the 10, to prove if another part of the lode is standing in that direction. A change has taken place in the cross-cut south of Hollingsworth's shaft, in the 74, where the country is intermixed with a good deal of spar. The machinery and pitwork are working satisfactorily.

PENHALLS.—S. Bennetts, Wm. Higgins, July 20: The 60 east has changed from rather high-price ground for driving to a comparatively low price; probably this is owing to a small slide coming in contact with the lode on the north side, and running nearly parallel with it; the lode, however, has been very fluctuating in value, sometimes producing splendid stones of tin, and at other times almost valueless. The ground driven here during the quarter has been about 10 fathoms. In the rise over this level we have opened up some good paying

ground nearly the whole extent of the rising (10 fms.), and continued worth about 7*l.* per fathom to the downright lode, just intersected. The sump winze, which is intended for the underlay shaft below this level, is sunk about 2 fms., which the lode is of a promising character, and worth 15*l.* per fathom. In driving the 60 west, south on the cross-course, 10½ fms., no further lode has yet been met with. The 50, west on new lode, has been extended during the quarter 5¾ fms., and although occasionally producing some good work, yet, on the whole, it has not been so productive as during the previous quarter. The rise on the same lode above this level, by the cross-course, has laid open good tribute ground throughout the 10½ fathoms wrought, and at present is worth 15*s.* per fathom. The east end, on this lode, has been further extended 4¾ fms., the former part of this being of little value, but the latter 2 fms. has fluctuated in value from 10*l* to 30*l.* per fathom, the present end continuing worth 25*l.* per fathom; this looks well for the ground between the 50 and 60 fm. levels, west of the shaft. The 50 west on the Pink lode, has not so far proved very productive, yet it has a promising appearance, and occasionally produces some good tinstuff, which is now worth 6*l.* per fm. The extent of the drivage here being 6½ fathoms. Although the 50 fm. level cross-cut south, on the cross-course, has been extended during the quarter 15 fms., yet with the exception of a very small vein of tin, in one instance, not a trace of any further lode has been seen; the ground, however, continues easy for exploration. The winze below the 40, on the Pink lode, has been sunk 4½ fathoms, and continues to produce, very irregularly, some good work, varying in value from 3*l.* to 7*l.* per fathom, down to the intersection of a flat slide which has just been met with. During the quarter we have cleared the old adit from the cliff to the Pink shaft, rebuilt the loading for bob-stand at the engine-shaft, and are progressing rapidly with the one by the Pink shaft, together with the other necessary alterations and preparations for draining the old mine, and shall do our utmost to get this in readiness for working by about the end of this month. On the whole, the mine is looking as well as we have seen it on any occasion for some time past; and although the costs for the quarter just commenced will be much increased by the necessary outlay for materials and labour in draining the old Pink mine, yet from present appearances we hope to be able to meet this extra cost by the returns.

PRINCE OF WALES.—J. Gifford, W. Gifford, July 24: In the 45 east the lode is worth 5*l.* per fm.; the stope in back of the 45 east is worth 10*l.* per fm. In the 45 west the lode is worth 20*l.* per fm.; in the rise and stope in back of the 45 west the lode is worth 25*l.* per fm. In the 55 east the lode is worth 15*l.* per fm.; two stopes in back of the 55 east are worth 25*l.* per fm. each; No. 1 stope, in back of the 55 east, is worth 20*l.* per fm. In the 55 west, the south part of the lode, on which we are, driving is worth 5*l.* per fathom. In the 55 cross-cut north we are daily cutting an increase of water. At Watson's shaft, below the 55, the ground is favourable for sinking. We hope to have about 130 tons of ore to sample on Friday next.

PROSPER UNITED.—J. Nicholls, July 24: Our new wheel, with the 32-head stamps, is gone to work, and is going on first-rate. I enclose list of our copper sampling yesterday (412 tons). We have cut a lode in the 50 fathom level cross-cut north about 1 foot wide—good work for copper and tin. I cannot state its value until I know the result of the assay. There is no other change to remark on in the mine.

REDMOOR.—T. Taylor, July 25: We have more spar in the south cross-cut at the 64, which is letting out more water. The ground in the north cross-cut contains a deal of prian and mundic. We have not much running water, but not nearly all the holes for blasting are wet. There are small branches cross-ing the ends, but as yet no lode of importance.

ROSECLIFF AND TOLCARNE.—R. Pryor, J. Phillips, July 24: The ground in the 50 fathom level cross-cut, north of Lindo's engine-shaft, has undergone a very favourable change, and the cross-cut is in from the shaft about 12 fathoms. The lode in the stopes in the back of the 30 fathom level, east of cross-cut, is at this time disordered by a slide, and not so good as when last reported on. The lode in the rise in the back of this level, west of cross-cut, is worth 5*l.* per fm. All other places are without change to notice since our last report.

ROSEWARNE CONSOLS.—J. Nancarrow, R. Knuckey, July 22: In accordance with a resolution passed at the last general meeting, we then suspended all the drivings, except the 80 west, which end has since been driven 5 fms.; the lode is 1½ ft. wide, containing copper ore, blende, mundic, &c. Not having sufficient work for the lander and kibble-filler, we put them in the 70 fm. level end for a few days, and they have driven about 3 ft.; there is a very fine look-ing lode 3 ft. wide, which yields some rich copper ore, is letting out a great deal of water, and looks as if it were coming into a good course of ore. Our decided opinion is that both of those ends should be driven, for they will ventilate each other; there are double the chances of discovery, and the extra cost will not ex-ceed from 10*l.* to 12*l.* per month. We have two pitches working on copper, at 13*s.* 6*d.* in 1*l.*, and two pitches on tin, at 15*s.* in 1*l.* We are also stoping a piece of ground left standing to the west of Ellen's shaft, where the lode is worth 12*l.* per fm. Having carefully estimated the cost and the returns, we consider that the mine can be worked for the next three or four months at a loss not exceed-ing 100*l.* per month, in which time some trial can be made of the ground about the caunter, which is likely to result in discoveries that will abundantly repay the outlay.—P.S. We have sampled to-day 17 tons of good ore.

SORTRIDGE CONSOLS.—R. Jackson, July 25: In the 140 cross-cut, north of the engine-shaft, the ground continues favourable for driving, and good pro-gress has been made. The 140 cross-cut south is without any change since last reported on.

SOUTH CONDURROW.—J. Vivian and Son, W. Williams, July 20: The lode in the 71, east of King's shaft, is about 2½ ft. wide, and about 2 ft. wide in the same level west, in both sides composed principally of quartz and flookan. We are now driving the levels and cutting plat, preparatory to sinking the shaft, below which we hope to commence in another month. In the 61 east the lode is 2 feet wide, and without alteration to notice since last report. The cross-cut north of this level is now in 7 fms.; ground easy for driving. In the 61 west the lode is 5 ft. wide, and producing tin to pay for driving. In the 51, west of King's shaft, the lode is increasing in size, favourable in appearance, and producing good stones of copper ore. The stopes are equally as productive as last reported. Old Tye shaft is now down to within 8½ fms. of the 51 fm. level.

SOUTH DARREN.—J. Boundy, July 22: In the 60 west the lode is 2½ feet wide, containing spar, copper, and lead, valued at 17*l.* per fathom, with a very promising appearance of further improvement. In the 50 west the lode is 2½ ft. wide, composed of a good mineralised killas, spar, copper, carbonate of lime, and lead ore, valued at 16*l.* per fathom, and still has a very promising appear-ance. No particular change worthy of remark has taken place in any other part of the mine during the past week.

SOUTH POWEY CONSOLS.—Francis Puckey, July 22: We are making good progress in driving the adit cross-cut north to intersect the north lodes; the stratum of ground is of a very congenial character for producing mineral. In the adit level, driving west of the cross-cut, the lode is divided by a small horse of killas, but which is already wearing out, and the two branches will again unite in a few fathoms further driving; each branch is of great promise, and, at the shallow depth of only 10 fms. below the surface, is producing stones of strong yellow copper ore, and presenting strong indications for productiveness when developed at a deeper level.

SOUTH FRANCES.—J. Pryor, July 25: In the 60 the lode in the end is 1 ft. wide, worth 1 ton of ore per fm.; they have 6 fms. more to drive to get over the orey ground they have in the 70. In the 70 end, east of Pascoe's shaft, the lode is split, with a horse in it. The lode is worth about 2 tons of rich ore, or 20*l.* per fm., not so good as it has been; they have driven 7 fms. through a fine lode of ore. The winze sinking under the 70, 4 fms. behind the end, is down 5 fms.; in this 5 fms. sinking it has been worth 50*l.* per fm.; not so good in the bottom now as formerly; the ore seems to be dipping east. In the 80 the lode is 3 feet wide, yielding about 4 tons of rich ore per fm. The end has been better. They commenced rising in the back of the 80 against the winze coming down from the 70, where they have got a good lode; not so good as it was upwards in the winze; no doubt it will hold orey through to the 70. They have driven 7 fms. through a rich lode of ore in the 70 to cut the same shoot of ore from 6 to 7 fms., as it seems to be dipping east. Captain Pascoe says that the 70 end is 3 fms. to the south of the boundary of North Basset. The mine in that direction is look-ing very well. He was very kind in answering any questions I asked him.

SOUTH HERODSFOOT.—Wm. Goldsworthy, July 24: There is no particular change to notice in the ground in the cross-cut at the 86 fm. level this week. The engine and pitwork are working well.

SOUTH WHEAL GRENVILLE.—G. R. Odgers, July 20: The men are getting on very well with the sinking of the engine-shaft below the 20, but we do not see any material change in the character of the lode or the ground. The lode in the rise above the 20 east is 2 ft. wide, composed of quartz and gossan, with stones of grey and black ore. The air is very close in this place, and we are compelled to put in air-pipes, so that we have not made as much progress this week as usual. The lode in the winze sinking below the adit level east is 2 ft. wide, com-posed of quartz and iron.

ST. IVES WHEAL ALLEN.—John Nancarrow, Joshua Daniel, July 22: The Carbona lode, below the mundic, continues to improve; it is now about 2 feet wide, and is worth 9*l.* per fathom. The east end, at Richards's, looks better than for some time past. There is a leader of tin coming into the lode, which is likely soon to be valuable.

TREWEATHA.—T. Foote, J. Scoble, July 24: We have finished laying the tram-road at the 50 south, and have commenced driving the end; the lode in which is 2 ft. wide, and worth 8 cwts. of lead per fm. We have two stopes in the back of this level, worth 6 and 5 cwts. of lead per fm. We calculate to set another stope in this level in a few days; as soon as the men in No. 2 stope get up above the level, so as to be out of the way, this stope will be set. We have suspended the driving of the 50 north, also the stope in the back of this level, for the present; these men are placed in the south level to stope. We have also suspended the driving of the 40 south for the present, and placed the men to stope the 40 north. The stope in the back of this level is poor at present. The lode in the 40 north is 3 ft. wide, and worth 3 cwts. per fm., a very promising lode, and likely to improve. There are two stopes in the back of this level, each producing 4 cwts. of lead per fm. The lode in the 30 north is 2½ ft. wide, and worth 4 cwts. of lead per fm. There are two stopes in the back of this level, each producing 4 cwts. of lead per fm.—South Mine: There is no alteration in the ground at the 63 fm. level cross-cut, still spare for progress. The ground in the rise in the back of the 53 east during the past week has been hard, but a change has taken place, and we are again making good progress; lode full 3 ft. wide, but poor. The tribute pitches are looking well, and the men getting good wages. At Harris's shaft we have completed all the timbering, and are now in good course of sinking. The ground is more favourable, and having the whim to draw away the stuff we hope to make good progress.

VIGRA AND CLOGAU.—W. J. Holman, July 25: At No. 2 mine visible gold still continues in the bottom of No. 5 sink, under the adit west, and from the bottom of No. 2 stope, under the adit east. Visible gold has also been broken during the week from No. 1 stope, under No. 1 line west, and also from surface stope, east of No. 1 shaft; the lode at the above places varies from 3 to 6 ft. wide, and produces good stamps work throughout. In the stope east from No. 4 shaft the lode still maintains its usual size and quality; here specimens of bismuth have been found, which invariably indicates the presence of gold in this mine. A stope has been commenced at the bottom of No. 3 shaft, which promises well; the lode is 5 ft. wide, and of good quality. At No. 1 and Vigra Mines there is not any change to notice. At the Old Clogau copper mine the preparations for the erection of the steam-engine are being pushed forward rapidly. All other surface operations going on well. At the reduction works we have a good supply of water, and 28 heads of stamps are at work. On Saturday next a bar of gold will be forwarded.

WEST BASSET.—G. Lightly, July 23: Grenville's Shaft: Grenville's engine-shaft, down 17 ft. below the 154 fm. level, is set to nine men to sink, at 44*l.* per fathom. The 154 is driven 20 fms. east of the cross-cut from shaft; the lode when last taken down was from 3 to 4 ft. wide, and yielded 2 tons of ore per fathom. At present we are driving in the granite on the south side of the lode, as we consider that by so doing we shall be able to prosecute our explorations, and take down the lode more rapidly, and at a less expense than we could do were we now to drive on the lode itself; set to six men, at 9*l.* per fathom. The same level is driven 21 fms. west of the cross-cut, the lode being now 3 ft. wide, and unpro-ductive. Since the last meeting some ore ground has been passed through at this point, but at present the lode is in a disordered channel of ground; set to four men, at 6*l.* 10*s.* per fathom. The 144 is driven 57 fms. east of the cross-cut from shaft; 13 fms. of this during the past two months, and through some rich deposits of ore. The driving of this level is for the present stopped, and the men are placed to rise to the 134 fm. level for ventilation, and to open up the ground; the lode in the rise being 3 ft. wide, and yielding 3 tons of ore per fathom; set to six men, at 2*l.* 10*s.* per fathom. The same level is driven 37 fms. west of the cross-cut; lode 2 feet wide, and unproductive; set to two men, at 4*l.* 10*s.* per fathom.—Thomas's Shaft, Caunter Lode: The 75 is driven 39 fms. east of the cross-cut; the lode is 1 ft. wide, containing copper ore, but not to value; set to two men, at 4*l.* per fathom.—Middle Lode: The 75 fm. level is driven 14 fms. east of the cross-cut; lode small, and unproductive; set to six men, at 9*l.* per fathom. The sinking of Sweet's winze from the 65 to the 75 fm. level, in a lode yielding 2 tons of ore per fathom, has been completed, and the men are now driv-ing west of the said winze to communicate with the 75 fm. level, mentioned above. About 4 fms. of ground has yet to be driven through, and when this is accom-plished six men will be placed to drive east of the winze, where, judging from the ore ground passed through in sinking, a better-defined and productive lode will, in all probability, be met with. The 65 on the north, or copper producing part of the lode, is driven 45 fms. east of the cross-cut; in the present end the lode is 1 ft. wide, composed of gossan, and yielding 1 ton of ore per fathom—a very promising lode; set to four men, at 6*l.* per fathom. The same level, on the south, or tin producing part of the lode, is driven 6 fms. east of Spargo's winze; lode worth 6*l.* per fathom, and likely to improve in value; set to four men, at 9*l.* per fathom. Some valuable tin ground has been laid open at this point. In a winze sinking under the 52, east of cross-cut, the lode is 3 ft. wide, yielding fair quality tinstuff, and opening up tribute ground; set to four men, at 7*l.* per fm. In a winze sinking under the 52, west of cross-cut, the lode is about 1½ ft. wide, yielding 1 ton of ore per fathom; set to two men, at 5*l.* per fathom. The winze on the cross-course from the 52 to the 65 fm. level cross-cut has been completed, and the men are now engaged clearing stuff, putting in tramroad, &c., prepara-tory to driving east on the lode at the 65 fm. level. At Thomas's shaft the shaft-men have been engaged in attending to the pitwork and fixing an angle-bob at the 65 fm. level, and will be occupied for a short time longer in making some necessary alterations in the pitwork at the 134 fm. level. The water having been forked to this level (134), we purpose allowing it to stand there, there being no present inducement to drain it out to a deeper point. The result of this arrange-ment will be a reduction in the consumption of coals, hitherto a heavy item in our merchants' accounts. During the past two months some valuable ground both for copper and tin has been laid open; and although, as will be seen from what is said above, the different points of operation are not at present very pro-ductive, the lodes generally present such favourable appearances as to justify the expectation that further improvements will shortly be met with.

WEST CARADON.—W. Johns, N. Richards, July 23: The main part of Jope's lode, recently cut in the 128 fm. level cross-cut north, is looking very well; the lode in each end, east and west of cross-cut, is worth 10*l.* per fathom. In the 116, west of cross-cut, the lode is improved, worth 8*l.* per fathom. The winze sinking in bottom of the 104, in advance of this end, is also worth 8*l.* per fm. The ground in the 104 is still hard. The lode in the 92 fm. level cross-cut east, and south of Allen's lode, is presenting a very kindly appearance, and, seeing that water is freely coming from the end, we have a right to expect an early improvement. Vivian's lode, in the 170, still holds out chances of great pro-mise, and, as we have just passed through a cross-course in this end, we are very anxious to see Allen's lode at this point; and, in order to do so, we shall have to drive a short cross-cut south, and we have to-day placed the men to drive in that direction. All other bargains are without any material change. The sink-ing of our shafts, Elliott's below the 170, and Marina's below the surface, we are pushing on with all energy to accomplish the objects we have before reported.

WEST CHIVERTON—(*Special Report*),—July 22: Hawk's shaft sunk to the 120 fathom level; the men now engaged cutting tip-plat and fixing skip-road. The 110, east of Hawk's, is worth 60*l.* per fathom. The 110 west is worth 40*l.* per fathom. In the 100, east of Hawk's, there is a good branch of lead on the south part of the lode, with a very promising appearance. The 100 west is worth 70*l.* per fathom—a fine looking lode. The south, or Valpy's, part is also a good lode, worth full 30*l.* per fathom. The winze sinking below the 100 is worth 30*l.* per fathom: this winze is sinking on the south, or Valpy's, part of the lode. In the 90 west the lode is 4 ft. wide, very promising, with good stones of lead. The 80 west is still driving north; no lode cut yet. In the 70 west the lode is worth 30*l.* per fathom, as far as yet seen.—Elizabeth Lode: The 80, west of No. 1 cross-cut, at Burgess's, is worth 10*l.* per fathom. The 80, east of No. 1 cross-cut, is worth 20*l.* per fathom. The rise in back of this level is worth 20*l.* per fathom. The 80, east of No. 2 cross-cut, is worth 6*l.* per fathom; I think the main part is not yet seen. The 80, west of No. 3 cross-cut, is worth 30*l.* per fathom. The 80, east of No. 3 cross-cut, is worth 6*l.* per fathom, and likely to improve. The 80, west of No. 4 cross-cut, is worth 15*l.* per fathom. The 80, east of No. 4 cross-cut, is worth 15*l.* per fathom. The 90, west of Burgess's, on the north part of the lode, is worth 20*l.* On the whole, I am pleased to inform you that you have a very fine mine, and one that will continue to give large dividends for a long time to come.

WEST MARIA AND FORTESCUE CONSOLS.—William Skewis, J. Donnal, July 23: Capel Tor Lode: There is no important change in the ground by the side of the lode in the 60, east of Maria engine-shaft. The ground by the side of the lode in the 50 east is still of the same favourable description; the lode will be taken down here in a few days, the size and value of it will be given in our next report; from the appearance of it, where cut into near the end, we are of the opinion that it will come down a good lode. The lode in the stope in the back of this level is 6 ft. wide, and yielding 5 tons of ore per fm. We have to-day commenced taking down the lode in the rise, and so far as seen we believe it will prove to be quite equal to the lode in the stope.—West Maria Lode: No lode taken down in the 60 east since last report; the end is very wet, and troublesome for driving. The drivage is by the side of the lode in the 50 east; when last taken down it was producing 2 tons of ore per fm. The same remark will apply to the lode in the rise in the back of this level. The winze in the bottom of this level is to-day suspended, in consequence of so much water; the lode will yield 3 tons of ore per fm. No lode taken down in the 40 east; the ground is favourable for driving. The lode in the stope in the bottom of this level is yielding 2½ tons of ore per fm.

WEST ROSE DOWN.—John Truscott, July 23: In the cross-cut north, in the 75, we have intersected what we believe to be Fisher's Lode; it is apparently dis-ordered, being split into branches, composed chiefly of quartz with peach, spotted with mundic and copper ore. The largest branch is about 4 in. wide; we shall open east on its course forthwith, and at any improvement will inform you.

WEST WHEAL TREMAYNE.—S. Roberts, July 25: I am pleased to say we have reached the bottom at last. I was in the 20 fm. level end last evening, and carefully and minutely looked at it; there is a rich branch of ore in it from the bottom to a little more than half-way up to the end, the back not being far enough yet from the cross lode to be settled and defined; the ore part of the lode is about from 6 to 8 in. wide, and appears to be of good quality. I think from what we see in the 10, and looking at the run of the ore ground dipping west, that we shall have a good lode in the 20. There is no cross-cut driven any-where below the adit, and below the 10 they have only sunk the shaft a little more than the size of a winze, and driven the end to the cross lode; there is scarcely room in the bottom of the shaft for a kibble of stuff.

WHEAL CREBOR.—J. Gifford, July 22: On Saturday last the following bar-gains were set:—The 120 west to drive by the side of the lode, by six men, stent 3 fms., at 8*l.* 10*s.* per fm. The cross-cut south in the 108 east to drive by six men; stent the month or cut the lode, at 10*l.* per fm. A winze in bottom of the 96 east to sink by the side of the lode, by six men, stent the month, at 8*l.* per fm.; the lode in the bottom of this winze, when last taken down, worth 15*l.* per fm.; the same being directly over the cross-cut in the 108 east, where we expect about 3 fms. more to drive to cut the lode. The 84 east to drive by the side of the lode, by two men, stent the month, at 4*l.* per fm. The cross-cut south in the 96 west, towards the Buctor lode, to drive by four men, stent the month, at 4*l.* 5*s.* per fm. Davis's pitch, in back of the 84 east, by two men, at 12*s.* 6*d.* tribute and 12*s.* 6*d.* per produce. The other tribute pitches, time not out.

WHEAL GRENVILLE.—G. R. Odgers, W. Bennetts, July 20: The lode in the 110, east of the engine-shaft, on the old lode, is 15 in. wide, producing grey and black ore; it is not so wide as it was, but of a most promising appearance. The lode in the rise above the 120 west is 2½ ft. wide, producing ore and tin. In the eastern end of the rise there is a good branch of ore, worth nearly 1 ton to the fathom. The stopes above this level are yielding tinstuff, and worth 4*l.* per fm. We have holed the rise above the 110 west, and have placed the men to stope west, where the lode is worth 5*l.* per fathom. The lode in the 100 west is 4 feet wide, containing a little copper ore and tin, worth together 5*l.* per fm. Three stopes above the 100 east are worth on an average 5*l.* 10*s.* per fathom. The lode in the winze sinking below the 90 west is 3 ft. wide, worth 4*l.* per fathom. The lode in the 90, east of the cross-cut, is 6 in. wide, with a branch of good ore 4 in. wide nearly over the end, worth ¾ ton of ore to the fathom; the ground by the side of this lode is white granite, and this was always considered favourable for copper ore in the caunter lode. The lode in the 80 east is 2 ft. wide, principally quartz, in which we find a little tin. The lode in the 80 west is 2 ft. wide, also yielding a little tin, but not to value. The stopes above this level are yielding about the same quantity of tinstone as for some time past. No other change.

WHEAL GRENVILLE.—G. R. Odgers, W. Bennetts, July 25: The men are en-gaged sending down the rods for sinking the new shaft below the 120 fm. level. We have no change to report in any operation since our advice of Saturday.

WHEAL KITTY (St. Agnes).—W. Polkinghorne, S. Davey, July 20: In the 82 west of Holgate's shaft, no change has taken place during the week.—New Shaft, Pyror's Lode: In this shaft, sinking below the 82, the lode is worth for tin 20*l.* per fathom. In the 82, driving east of shaft, the lode is worth for tin 16*l.* per fathom. In the 82, driving west of shaft, the lode is large, and worth for tin 16*l.* per fathom. In the 65, driving west of shaft, the lode is 2 feet wide, and worth for tin 12*l.* per fathom. The lode in the winze sinking below the 54, west of shaft, has very much improved during the week, now worth for tin 15*l.* per fathom. In the 44, driving east of shaft, the lode is yielding a little tin.—Vottle Lode: In the 24, driving east of cross-cut, the lode is poor.

WHEAL KITTY (Uny Lelant).—Wm. Rosewarne, July 25: North Russoe Lode: The lode in the 150 fm. level, east of the winze, is worth 6*l.* per fathom. The lode in the 150 fm. level, west of the winze, is worth 3*l.* per fathom. The lode in the 140 fm. level, east of Bolitho's rise, is unproductive. The Carbona at the 120 fm. level, west of Bolitho's rise, is worth 12*l.* per fathom.—South Rus-soe Lode: The lode in the 30 fm. level, east of the boundary shaft, is worth 5*l.* per fathom. The lode in the 30 fm. level, west of the boundary shaft, is worth 5*l.* per fathom. The lode in the winze sinking below the 20 fm. level, east of the shaft, is worth 3*l.* per fathom. No other change to notice in any of the other bargains during the past week.

WHEAL SPARNON.—W. Tregay, E. Chegwin, July 20: The lode in the shaft is composed of gossan, prian, quartz, and a little mundic; still in the quarry stone, which probably may be 4 or 5 fms. deeper. Under this we should expect an improvement, the lode looking very kindly.

WHEAL MARY ANN.—P. Clymo, J. Harris, J. Stevens, J. Skeate, July 25: Clymo's shaftmen are still engaged cutting a trip-plat at the 230 fm. level. The 220 fm. level, both north and south of Clymo's shaft, is still retaining its size, and letting out water freely; it is in appearance very promising. In the 210 north the lode is 2 ft. wide, worth 4*l.* per fathom; in the same level south it is 5 ft. wide, worth 18*l.* per fathom. In the 200 north it is 2 ft. wide, worth 4*l.* per fathom; in the same level south it is 2½ ft. wide, and worth 9*l.* per fathom. In the 190 north it is 2 ft. wide, worth 10*l.* per fathom: in the same level south it is 1½ ft. wide, worth 6*l.* per fathom. In the 180 north it is 4 ft. wide, worth 10*l.* per fathom; in the same level, south of the slide, we have met with a capel, letting out water freely, and we soon expect an improvement here. The stopes and pitches are producing much as usual. We have this day sold a parcel of lead ores—computed 60 tons to Messrs. R. Michell and Son and Messrs. the Burry Port Smelting Company, at 24*l.* 6*s.* 6*d.* per ton.

WHEAL UNY.—S. Coade, M. Rogers, July 20: The lode in the 130 east of engine-shaft, is worth 25*l.* per fathom. The 130, west of incline shaft, is worth 10*l.* per fathom. The 120, west of incline shaft, is worth 7*l.* per fathom. We intend to sell a parcel of tin on Wednesday next. We are sorry to say the fend-off bob in the engine-shaft broke on Wednesday morning last; the wood was de-cayed, having been working from the commencement of the mine. We have re-placed it with new wood, and got to work again this morning; it will cause a little delay in working in the bottom of the mine for a few days.

FOREIGN MINES.

ST. JOHN DEL REY.—The advices from Morro Velho to June 17 state that the produce for May was 47,990 oits., upon melting which into bars the loss was 282 oits., leaving 47,708 oits., at 7*s.* 9*d.*=18,486*l.* 17*s.*, whilst the cost was 11,456*l.* 18*s.* 6*d.*, leaving a profit on the May working of 7029*l.* 18*s.* 6*d.* The gold extracted in the first 11 days of June was 16,406 oits., from 2292 tons of ore =7·157 oits. per ton. This produce is better than was extracted during the se-cond division of May, and is equal to that obtained in the first division, both as regards standard yield and daily produce.

DON PEDRO NORTH DEL REY GOLD MINING COMPANY (Limited).

Paid-up capital	£53,313 0 0
Balance of profit and loss account, Jan. 1, 1867	£ 1,693 18 10
Profit from January to May inclusive	27,842 15 10
Total	£29,536 14 8
Less interim dividend of 1*s.* 6*d.* per share and income tax, declared May 31	5,807 7 1
Profit	£23,729 7 7

[An extraordinary meeting is convened for Aug. 28, to authorise the directors to pay a further interim dividend of 3*s.* 6*d.* per share for the three months end-ing June 30, being at the rate of 100 per cent. per annum.]

Capt. T. Treloar reports—The gold return for May amounts to 29,060 oits., or 4994 oits. more than that of the previous month.

PRODUCE AND COST.

Produce, 29,060 oits., at 8*s.* 6*d.* per oit.	£12,350 10 0
Cost	2,822 2 10
Profit	£ 9,528 7 2

For four consecutive months it has been my privilege to report prosperity con-tinually on the increase. The results for May are more brilliant again than those of the previous month, the produce being 29,060 oits. of gold = 3353 oz. troy, and the profit 9528*l.* 7*s.* 2*d.* This, I am sure, will be gratifying alike to the directors and to the shareholders. The value of the gold, the cost, and the pro-fit, so far this year, stand as follows:—

Months.	Value of gold.	Cost.	Profit.
January	£ 2,986 1 0	£ 1,866 1 7	£ 1,119 19 5
February	5,276 16 0	1,918 15 8	3,358 0 4
March	8,528 16 0	2,395 1 7	6,133 14 5
April	10,228 1 0	1,525 6 6	7,702 14 6
May	12,350 10 0	2,822 2 10	9,528 7 2
Total	£39,370 4 0	£11,527 8 2	£27,842 15 10

The cost amounts to about 30 per cent. of the value of the gold, the remaining 70 per cent. is profit, and such a result is only obtainable out here from mines on jacoting formations. Need I add that this is an important feature in favour of jacotinga mines? Maquiné Mine has again yielded a highly-pleasing return. The works on the shoot of gold have reached the horizon of Alice's level, and a communication to the latter is now a great desideratum for extracting the ore, for ventilation, and for the safety of the people.

ANGLO-BRAZILIAN GOLD COMPANY (Limited).—Capt. T. Treloar reports—The produce for May amounts to 2857 oits. of gold, = 329 ozs. troy.

PRODUCE AND COST.

Produce, 2857 oits., at 9*s.*	£1285 13 0
Cost	1885 12 0
Loss	£ 599 19 0

MINE.—The work at the different sections has been carried on with regularity, and the lodes seldom look better—that at the Buraco Secco particularly so. The lode at Dawson's is increasing in size, and is still highly charged with pyrites. We intend draining some of the old workings west of Haymen's towards Daw-son's. Sinkings at Foster's have been again commenced, and the shaft is in first-rate condition.

ROSSA GRANDE GOLD.—Capt. Brokenshar, June 8: Since my last I have heard of a person, living in Sabara, that was underground feitor here at the time Emilio Soares cut the timber, and abandoned the mine. I imme-diately wrote, and got him to come here. On going into the adit, and seeing the nature of the ground, he immediately said that he was sure of its being the same lode that he raised the gold from. It appears from his statement that we must drive east from the adit to get under this place, and he says we shall find gold before we drive the 22 fms., the distance to get under the end. I broke a stone from the end whilst we were there, bruised, and washed it in a batea, and it yielded by far the best produce that I have yet seen—after the rate, ac-cording to estimation, of at least 2 ozs. to the ton of stone. He also informed me that the stone at times is from 2 to 3 fms. wide, and the killas surrounding the stones where they were found rich also contained gold, which I shall care-fully examine as I proceed. The stamps was put to work on the 4th inst., and is doing great duty so far as pulverising stone is concerned. The produce I cannot form much idea of yet, as I believe the stone to be the poorest part of the lode. Next month I think the produce will be better.

CAPE COPPER.—Namaqualand, June 8: Some of the riders had commenced work, and 270 tons had been carried from the mine, but more rains would be required before the riding season could fairly commence. The convict barracks at Green Kloof were nearly completed. It is understood that the Go-vernment intend sending the remaining 150 convicts, making the 300 promised, at the earliest possible opportunity. Capt. Clemes writes from Ookiep—"Hav-ing now brought most of our surface works to a completion, excepting the con-nections for pumping, already commenced, we are in a position, with a large head of ore ground laid open by stripping, to increase the monthly ore returns." —"The near approach of that which promises to be a good riding season has in-duced me to increase the sampling for the past month to 500 tons of rich ores; and should there be occasion for it, with present capabilities, the monthly pro-duce of the mine can be very materially increased, if required, without involv-ing much additional expenditure."—"Driving south from the east level, in in-cline tunnel, the ground continues of a most favourable nature for making rich deposits of ore in depth, as noticed in my recent letters. This ground will be further proved by a deeper level from the engine-shaft at an early period."—Speaking of the expenditure that has been incurred during the past two years in removing top-rock, Capt. Clemes writes—"There is sufficient ore ground now opened on the surface to occupy several years in working down."—The trials at Nabapeep, Koperberg, Rondeklipfontan, and Anabeeb, have not resulted favour-ably, and do not give sufficient encouragement for any further present expendi-ture. On this subject Capt. Clemes writes—"The unfortunate issue of those ex-ploratory works are, no doubt, very discouraging, but we must not forget that discoveries may be made on other portions of your property, and that the large developments of ore at Ookiep, together with the increased confidence which this gives us in the durability of that mine, more than compensates for the dis-appointment felt in the want of success elsewhere, for though the yield of Spec-takel is now cut off, and the raising of ore confined entirly to one mine, the re-turns are larger and more certain than in former times, when they were made up from three mines in full work." The furnaces had smelted Ookiep dredge ores of 16 per cent., mixed with Springbok poor ore of 11 per cent., and had pro-duced 53 tons (Swansea weight) of regulus of 53 per cent. The present mail steamer brings 35 tons of ore and 40 tons of regulus; and bills of lading, per Hastings, are to hand for 473 tons of ore, 23 tons of regulus, and 29 tons of metal. The Ocean King arrived at Cape town on June 16, and would leave for Hondekip in about 14 days from that date to take in a full cargo of ore and regulus. The Croydon had nearly completed loading a full cargo at Hondeklip on June 7. During the past month 537 tons of ore have been sold by public ticketing, at 14*s.* 1*d.* per unit.

VAL ANTIGORIA.—James Mitchell, Thomas Roberts, July 17: This week we have communicated the adit level with the 10 fm. level by the winze sunk from the adit, thereby laying open a large piece of orey ground. The 20 end, south of shaft, has now been driven 23 fms., and a winze sunk under the 10, and holed to the 20, the whole being productive ground. The adit, north of chain shaft, has been driven 5 fms. The winze behind this end has been sunk 7 fms., part of which sinking, is in ground yielding 1 oz. of gold per ton of ore. We remit 23 ozs. of fine gold, worth, as usual, about 4*l.* per oz., and obtained as heretofore, by working the very limited amalgamating apparatus at our disposal. We are now anxiously expecting the arrival of the machinery from England. We intend to put it up with all possible speed, and our gold returns will, after its erection, increase accordingly.

PESTARENA.—T. Roberts, T. Warne, W. Jenkin, J. Roberts, July 16: Val Toppa: The stopes continue as productive as last reported.—Battigio: We have commenced stoping the bottom of the Cavetta level, where the lode yields at present 10 tons of ore per fathom, worth 1 oz. of gold per ton. Other stopes as last reported.—Pestarena: The principal stopes in the bottom of the Peschiera are still worth 190*l.* per fathom, and those of the Aquavite 80*l.* per fathom. The average yield of the ore treated by the native mills since the last remittance, in June, to the present day has again been over 2 ozs. of gold per ton of ore. We have no doubt that the remittance made this day to the office from amalgam obtained since our June remittance will be satisfactory to you. It is in ten ingots of fine gold, weighing 34,606 grammes. Our machinery works well, and we fully anticipate an increase in our future remittances. Since the above, 1112 ozs. of fine gold have been received at the office, and sold for 380*l.*

PETROLEUM FOR STEAM NAVIGATION.—The third trial of petro-leum for generating steam in navigation was made at Boston on July 3 on board the Government steamer Palas, and the results fully confirmed the great success achieved on the two previous trials. The distance steamed was 44 miles, occupy-ing four hours and ten minutes, consuming eight barrels of petroleum. Greater speed would have been attained but from a derangement of the air-pumps, which were temporarily connected. On the motion of Dr. J. V. C. Smith, a meeting of the gentlemen on board was called, of which Mr. C. W. Cartwright, late Presi-dent of the Manufacturers' Insurance Company, was chosen President. Brief addresses, relating to the importance of the invention now being tested, were made by Messrs. Smith, Cartwright, Prof. Josiah P. Cooke, of Harvard College, and others. The following resolutions were adopted unanimously:—

"That we have witnessed with great interest the third sea trial of the United States steamer Palas, using crude petroleum as fuel, instead of coal, and cheer-fully bear witness that in our judgment the apparatus is simple, practical, effi-cient, and safe; that a run of between 40 and 50 miles on the open sea, at a speed 50 per cent. greater than ever was made on this steamer with coal, and with a

steady, uniform pressure of steam, demonstrates the practicability of using petroleum as fuel, and the great value of the invention.

That the commercial and manufacturing interests demand cheap freights, with rapid transportation, and that the experiment we have to-day witnessed gives promise of great results to be attained by this discovery.

That the thanks of the commercial world are due to Col. H. R. Foote and his associates for this discovery, which must produce an important revolution in ocean and river steam navigation."

A resolution of thanks to the United States naval officers attached to the Palas, for courtesies extended, was also passed. The trial to-day was made under the supervision of chief engineer Kellogg.—*U.S. Railroad and Mining Register.*

REPRESENTATION OF THE MINING INTEREST IN PARLIAMENT.—The rumour that Mr. Brett was to be elevated to the judicial Bench brought forward several aspirants to the honour of representing Helston, one gentleman, Mr. JOHN LEA, being particularly worthy of the support of all connected with the mining interest. Mr. Lea has lately been investing in mining property in Cornwall, and is anxious for an extension of enterprise in the county, which may stimulate the reanimation of its special interests, now so unnaturally depressed, and from the independent and impartial tone of his address there can be little doubt that he will be favourably received whenever he appears as a candidate for parliamentary honours amongst a mining community.

GOLD MINING IN BRAZIL—THE TAQUARIL COMPANY.—In addition to the favourable advices recently received confirmatory of the value and capabilities of the Taquaril Mine, a communication has been forwarded by Mr. William Matthews (the engineer of the Devon Great Consols). He states that in 1832 Capt. G. F. Lyon, R.N., the then proprietor of Morro Velho Mine (St. John del Rey), agreed to buy one-third of Taquaril; and that Mr. Matthews's father, who was the engineer of the Morro Velho Mine, was directed by Capt. Lyon to erect a water-wheel (about 30 feet diameter), which was done, but before the old shaft had been cleared up Capt. Lyon was compelled to leave for England, on account of failing health, and died on his homeward voyage. Mr. Matthews also states that the "old shaft was sunk on the course of the lode, and that a good productive lode was found; that he and his brother were allowed on one occasion, when underground, to break some specimens of gold for themselves; and that his father (who was at the Gongo Soco Mine during its most productive period, from 1825 to 1831) stated that the specimens brought up from the Taquaril Mines were of a very fine character, besides which they were large. A considerable quantity of gold was returned, but it became necessary to sink a new shaft." At that time, it appears, Colonel Trule became a director, and Capt. Stephen Prideaux (an old Gongo Soco agent) was the captain. Mr. Matthews thinks it was Mr. Oxenford who offered 80,000*l.* for the mine at that time, but that the sum required was 100,000*l.*; and Mr. Walter Furst, in his interesting "Account of Some of the Principal Jacotinga Mines in Brazil," states that "with the assistance of the late Capt. Lyon, in 1832, the owners were enabled to discover a rich vein, giving at first 4 to 6 lbs. of gold daily, and subsequently gold to such an extent that the late Mr. Charles Herring (superintendent of the St. John del Rey), and Mr. Oxenford (of the National Brazilian Mining Association), each on behalf of their respective companies, contended for the purchase of the mine; but some time having elapsed before the directors of the latter company would make up their minds to purchase, and the directors of the former having in the interim purchased the mine of Morro Velho, and the rich end having got into water, the Taquaril Mine, notwithstanding its well-known rich vein, has not been worked for many years. Mr. Matthews concludes his communication by expressing a most confident opinion that "if properly worked, Taquaril will prove a valuable mine."

INSTITUTION OF CIVIL ENGINEERS.—During the half century's existence which the Institution of Civil Engineers has enjoyed, its progress has been uninterrupted, and at the present time the privilege of being permitted to attach to one's name the initials indicating connection with that institution is as highly prized in the engineering profession as is the F.R.S. in the world of general science; it will, therefore, be gratifying to all who desire that the civil engineer should continue to occupy as high a position as he has heretofore occupied, to learn that a step has been taken by the institution, the effect of which will be to ensure a steady accession to the strength of the body, and the maintenance of the high standard of knowledge requisite to obtain connection with it. A Student Class has been created (as a substitute for the Graduate Class, which has heretofore existed), constituted in such a manner as to enable all who are regularly studying for the profession to prepare themselves for afterwards occupying the position of Members or Associates of the institution, with credit to themselves and with honour to the general body of members. The regulations will not, as some have most erroneously supposed, interfere in the slightest degree with any of the minor societies which have from time to time been constituted to facilitate intercommunication of ideas amongst those who, although employed in connection with engineering works, have not received that scientific education necessary to entitle them to admission to the Institution of Civil Engineers; because, even for admission to the Student Class, it is necessary that the candidate should be *bona fide* in the course of preparation and training under a member or associate of the institution, with the object of following the profession of a civil engineer. The members of the minor societies will, so far as the Institution of Civil Engineers is concerned, continue to occupy the same position as ever, but the Institution itself has created additional facilities for attaining a position which shall place it further than ever above all would-be kindred associations.

CORNISH PUMPING ENGINES.—The number of pumping-engines reported for June is 23. They have consumed 1746 tons of coal, and lifted 13·7 million tons of water 10 fms. high. The average duty of the whole is, therefore, 52,700,000 lbs., lifted 1 ft. high, by the consumption of 112 lbs. of coal. The following engines have exceeded the average duty:—

Chiverton—Cookney's 60 in. ..... Millions	54·4
Cargoll Mines—Michell's 72 in.	62·8
Chiverton Moor—70 in.	59·4
Dolcoath—Harriett's 60 in.	58·0
Great Work—Leed's 60 in.	59·1
North Roskear—Doctor's 70 in.	56·7
North Wheal Crofty—Trevenson's 80 in.	55·9
Providence Mines—40 in.	57·2
South Wheal Frances—Marriott's 75 in.	53·3
West Chiverton—Hawke's 80 in.	65·0
West Wheal Seton—Harvey's 85 in.	76·2
Wheal Seton—Tilly's 70 in.	68·2

THE COLLIERS' STRIKE AT OLDHAM.—The strike of colliers at Oldham against a reduction of 2d. in the ton still continues. A placard has been issued by the general body of miners, stating their grievances, and soliciting the support of the public in what they term the struggle of "right against might." From 50 to 100 pitmen have arrived at Hollinwood from the neighbourhood of Bilston, in Staffordshire, and are now working in the pits belonging to the Chamber Colliery Company. Some of these new comers have, it is stated, been working near Pendleton during the recent strike at that place. There seems to be a considerable amount of antagonism manifested by the turnouts towards the Staffordshire miners, and amongst some of them there is a very strong inclination to repel the invaders. The police are, however, keeping a sharp and vigilant look-out, and seem determined to prevent any breach of the peace for the future. A few of the men who are on strike have gone to work at a new pit, in the neighbourhood of Wakefield, where Lancashire miners are much sought after. One instance of misconduct has occurred at the Lower Moor Colliery, belonging to Messrs. Mayall and Seddon. A miner, named William Brierly, of Lees Road, after being on strike for four or five weeks, was requested by the under-looker to send his lamp in, and upon bringing it to the office he made use of very violent language, stating, amongst other things, that if they were all of a mind like him there would be some Sheffield outrages at Oldham. The man, who was quite sober, was instantly ordered off the premises.

BILLS OF EXCHANGE.—The *Law Times*, remarking upon some suggestions made by Mr. Grain, a notary public, respecting bills of exchange, says:—"He proposes that days of grace should be abolished, that bills falling due on Sundays or holidays should be paid on the day after instead of the day prior to maturity, and that for noting or protesting bills and notes, instead of the notarial demand for payment being necessary on the day of maturity, a demand on the following day should be sufficient. Mr. Grain considers that the system of days of grace is an anachronism, and he adds that it is inconsistent with the practice of a majority of the leading commercial nations. This is a question for the consideration of the mercantile community, and, whatever the alteration might be, it would not in any way affect the present system of action and pleading upon bills of exchange."

The Stock Exchange Committee have ordered the shares of the Rossa Grande Gold Mining Company to be quoted in the Official List.

LONDON GENERAL OMNIBUS COMPANY.—The traffic receipts for the week ending July 21 was 12,412*l.* 16s. 7d.

The Mining Market; Prices of Metals, Ores, &c.

METAL MARKET—LONDON, JULY 26, 1867.

COPPER.	£ s. d.	£ s. d.
Best selected..p. ton	79 0 0-	80 0 0
Tough cake and tile	74 0 0-	76 0 0
Sheathing & sheets.	79 0 0-	80 0 0
Bolts	83 0 0-	—
Bottoms	88 0 0-	—
Old (Exchange)	72 0 0-	—
Burra Burra	84 0 0-	—
Wire ..... per lb.	0 0	11¼
Tubes ..... "	0 0	11¾

BRASS.	Per lb.
Sheets ..... per lb.	9d.-9½d.
Wire ..... "	8½d.-9½d.
Tubes ..... "	10¾d.- —
Yellow Metal Sheath.p. lb.	7d.- —
Sheets ..... "	6¾d.-7d.

SPELTER.	Per ton.
Foreign on the spot.	£21 0 0- 21 5 0
" to arrive ..	21 0 0- 21 5 0

ZINC.	
In sheets	£27 0 0- —

TIN.	
English blocks	91 0 0
Do., bars (in barrels)	92 0 0
Do., refined	94 0 0
Banca	91 0 0
Straits	87 0 0

TIN-PLATES.*	Per box.
IC Charcoal, 1st qua.	1 7 6- 1 9 6
IX Ditto, 1st quality	1 13 6- 1 15 6
IC Ditto, 2d quality..	1 5 6- 1 7 6
IX Ditto, 2d quality..	1 11 6- 1 13 6
IC Coke	1 3 6- 1 4 6
IX Ditto	1 9 6- 1 10 6
Canada plates, p.ton..	13 10 0- —
Ditto, at works	12 10 0- —

IRON.	Per ton.
Bars Welsh, in London	6 10 0- —
Ditto, to arrive	6 10 0- —
Nail rods	7 0 0- 7 10 0
" Staffd. in London	7 10 0- 8 10 0
Bars ditto	7 10 0- 9 10 0
Hoops ditto	8 10 0- 9 12 6
Sheets, single	9 5 0-10 0 0
Pig No. 1, in Wales	3 15 0- 4 5 0
Refined metal, ditto..	4 0 0- 5 0 0
Bars, common ditto..	5 10 0- 6 0 0
Do. mrch. Tyne or Tees	6 10 0- —
Do., railway, in Wales	5 10 0- 6 0 0
Do., Swed. in London.	10 5 0-10 10 0
To arrive	10 5 0- —
Pig, No. 1, in Clyde	2 14 0- 3 2 6
Do. f.o.b. Tyne or Tees	2 9 6- —
Do. Nos. 3, 4, f.o.b. do.	2 6 6- 2 7 0
Railway chairs	5 10 0- 5 15 0
" spikes	11 0 0-12 0 0
Indian Charcoal Pigs, in London p. ton..	7 0 0- 7 10 0

STEEL.	Per ton.
Swed., in kegs (rolled)	14 5 0- —
" (hammered)	15 0 0- —
Ditto, in faggots	16 0 0- —
English, spring	17 0 0-23 0 0
QUICKSILVER (p. bottle)	6 17 0- —

LEAD.	Per ton.
English Pig, com.	19 15 0- —
Ditto, LB.	20 0 0- —
Ditto, WB	21 15 0- —
Ditto, ordinary soft..	20 0 0- —
Ditto, sheet	20 10 0- —
Ditto, red lead	21 0 0- —
Ditto, white	27 0 0-30 0 0
Ditto, patent shot	23 0 0- —
Spanish	19 10 0- —

* At the works, 1s. to 1s. 6d. per box less.
† A Derbyshire quotation: not generally known in the London market.

REMARKS.—The directors of the Bank of England, at their weekly meeting, on Thursday, reduced the Bank rate of discount to 2 per cent.; we fear, however, that this step, which, under ordinary circumstances, would have been hailed with much satisfaction, will now have little or no effect in causing any improvement in business, which seems to have arrived at a point of dulness and inactivity beyond which it is almost impossible to go. The Money Market has now been very easy for some months, and there is plenty of money waiting for investment, but still this does not seem in any way to produce more activity in commercial affairs generally, or tend to induce parties to enter into operations. It appears that at present something else is required besides cheap money in order to bring about a return of activity in business. In the Metal Market matters remain much the same as they were at our last report. Prices in most cases show a downward tendency, and manufacturers are only too ready to accept orders at a reduction, whenever orders can be obtained, but, unfortunately, they are now "few and far between," and very rarely does it happen that any really good orders are given out. We still hope, however, that with a good harvest we may find business again revive, and that we may see an improved demand spring up from the Continent, America, and the East, which will have the effect of causing our market to show an improved appearance, and give a stimulus to the metal trade, which will rouse it from the drooping condition in which it has so long continued, and from which all those connected with the trade are so anxious to see it emerge.

COPPER.—Business in this metal continues very dull, and no appearance of revival has yet occurred. Sales of sheet and sheathing have taken place at 79*l.*, and tough ingot at 74*l.*; Wallaroo has been sold at 83*l.*; and Chili bars at 68*l.* 5s.

IRON.—In Stafordshire there is a general agreement that the quarter opens with an improvement in the trade, and the extent to which contracts for pig-iron have been entered into proves that manufacturers anticipate that the trade will rather improve than otherwise. There is still a good demand for India, and a fair trade doing with the Continent, while orders for the United States, though still small, are fully as good as they were. Home merchants seem more disposed to buy, and the Midland Railway have made a tolerably large purchase of rails. In Welsh the more cheerful tone assumed in the trade continues, and the probability is that the anticipations of the ironmasters respecting the future will be gradually realised. Enquiries from the United States are increasing, and a demand is also springing up on account of the East Indian and some other foreign markets; and these facts, coupled with the expectation of considerable orders for rails from Russia and America, give a tone of increased confidence to the trade, that has not been witnessed for some months past. On home account actual business continues on a small scale, but buyers' requirements are such that they cannot fail eventually to send more orders. In Swedish iron the market is a little firmer. In Scotch pig-iron the market has been very inanimate during the past week, and prices have, consequently, tended in favour of buyers. The last price received from Glasgow was 52s. 6d. cash.

LEAD continues quiet, prices are, if anything, a trifle easier.

TIN.—At the commencement of the week business was done in Straits at 87*l.* 10s., but latterly the market has become somewhat easier, and transactions have occurred at 87*l.* cash, though holders generally are not much disposed to accept this price. In Banca little is doing, nominal price 91*l.* In Holland the price now quoted is 53½ fls. English is not obtainable under official quotations.

SPELTER.—The market has been quiet during the week, and transactions only limited, the present quotation for parcels on the spot is 21*l.* to 21*l.* 5s.

TIN-PLATES.—The demand is now pretty good, prices are tolerably firm, and the works are generally in fair working.

STEEL remains without change.

QUICKSILVER.—The demand has rather improved.

MIDDLESBROUGH, JULY 25.—The "Iron Trade Review" states—The Cleveland pig-iron trade is about stationary. No increase of stocks in the warrant stores this week. Shipments tolerably well maintained to Belgium, France, South Wales, and Scotland. Prices 45s. No. 3, 44s. No. 4 f.o.b.; four months' bill, or 1s. per ton less for cash. Manufactured iron in moderate demand, but prices low. Rail and plate mills fairly occupied.

The MINING SHARE MARKET forms no exception to the general depression that affects all classes of public securites, and which has lately been described as having assumed that *chronic* character that not even money at 2 per cent., and an abundance of it, without means of employment, can overcome it, or bring about a restoration of public confidence. In reference to the Mining Market, there can be but little doubt that confidence is being injured, and mining business seriously affected, through the means lately adopted to frighten shareholders out of their property in apparently successful mines, merely for the purpose, as it would seem, of making money by "bearing" operations previously entered into. No agents of mines, however respectable or trustworthy, can stand against combinations of this sort when they exist, and it is not surprising that the public, perplexed by conflicting statements, should sell out their shares, and have done with mining altogether. Prince of Wales shares during the early part of the week fluctuated very much, but leave off 56s. to 58s.; no change in the report this week. Wheal Buller, 20 to 22¼; at the meeting the accounts showed a loss of 175*l.* 9s. 8d. on two months' working, and a balance against the mine of 278*l.* 18s.; the report values the different points in operation at 207*l.* per fm. in the aggregate, and the agents conclude by saying—"We consider the prospects of the mine are very encouraging." Chiverton Moor, 5¼ to 5½; Chontales Gold, 4¾ to 5.

Great Retallack, 4¼ to 4½; at the meeting the accounts showed a balance of liabilities over assets of 408*l.* 17s. 4d., and a call of 2s. per share was made. The report, which was very sanguine as to future operations, states that there are 15 tons of silver-lead ore at surface. Clifford Amalgamated, 7 to 7½; Cook's Kitchen, 9 to 10; East Basset, 15 to 17; East Caradon, 5 to 5½. Marke Valley, 4¼ to 4½; the ends in the aggregate are turning out 20 tons of ore per fathom, and the mine bidding fair for a long continuance of dividends. East Lovell, 6¼ to 7; East Russell, 1½ to 1¾ (call paid); East Wheal Grenville, 1¾ to 2; Great Laxey, 15½ to 16½; Great North Downs, 3¼ to 3½; Great Wheal Vor, 16 to 17; North Crofty, 3¼ to 3¾; North Retallack, 4 to 4½; North Treskerby, 17s. 6d. to 20s.; Providence, 27 to 28; South Condurrow, 11s. to 13s.; Tincroft, 11¾ to 12¼; West Chiverton, 66 to 67½; Wheal Basset, 70 to 75; Wheal Chiverton, 7 to 7½; Wheal Crebor, 5s. to 7s. 6d.; Wheal Grenville, 15s. to 20s.; Wheal Mary Ann, 14 to 15; Wheal Seton, 110 to 115; Wheal Trelawny, 8 to 9. Devon Great Consols, 400 to 410; the directors have this day declared a dividend of 7168*l.* (7*l.* per share) from the profit of two months, and, after payment of dividend, there remains in hand a balance of 19,006*l.* 7s. 1d.

PRINCE OF WALES.—We are more particularly led to make the following remarks from the numerous communications addressed to us in reference to this mine, which, we believe, even its enemies allow has been thus far most successful, and of whose future the official agents should be at least as well able to judge as those who, from its first appearance, have predicted its failure, and have, so far, been eminently mistaken. The cry is, as we understand it—that the mine is being unfairly worked—that is to say, too much ore is being taken away, and not sufficient left in reserve. To this the reply of the agent, who, in common fairness it must be said, up to this time, has justified his assertions by results, is that he is not taking away so much ore as he is discovering, even at the reduced value of the ends, and that there will be no difficulty in keeping up the present returns by working the mine fairly, even taking the value of the ends as at present, and that they are more likely to improve than otherwise. Having thus given the outlines of the two conflicting opinions as to the future, we are enabled to give from official documents the present position of the company, which is this:—The last sale of ore (930*l.*) left a profit on the month's working of over 500*l.*, and the profit made for the quarter is more than 1500*l.* At the meeting, to be held in August, the accounts will show a balance in hand of nearly 3000*l.*, without taking into account the 130 tons of ore sampled this week, and which will probably have been sold for over 1000*l.* prior to the meeting. After declaring a dividend, therefore, of 2s. 6d. per share, a large balance will be left in hand. In reference to the state of the reserves, it is not twelve months since the mine commenced making returns of copper, and from the first sale to the present moment the ores sold have realised about 6000*l.*, and as the reserves in the mine are valued by the agents at 20,000*l.* (which valuation has been confirmed by one of the most experienced agents in the district), it follows that so far from being unfairly worked, not one-third of the ore discovered has been taken away, and that the reserves, even should the ends fail altogether, which is not at all likely, are such as to keep up the returns for a lengthened period beyond the time when the 65 or next level will be opened out. Such, then, is the real position of the Prince of Wales Mine; it has reserves of 20,000*l.*, it is making a profit of 500*l.* per month, with a fair prospect of continuing it for a long time to come, and has the further prospect of cutting the north lode, from which we are assured there are already indications of a course of ore, and with all this before them, the shareholders may be able to judge for themselves the value of their property.

The market for Mine Shares on the Stock Exchange has, during the week, been dull and drooping. Don Pedros have fallen to 1¼, 2 prem., notwithstanding the dividend and good report. Pestarenas are quiet at ¼ prem., and very little doing in the shares. Anglo-Brazilians are flat, at ⅛ to ¼ prem. Chontales, on the other hand, are firm, at ⅛ to ¼ prem.; the very large remittances that are promised by the next and following mails, and the good reports, have imparted firmness to the market. St. John del Reys are less firm, but still moderately steady, at 55 to 57. Taquaril shares have been well applied for, and are quoted ¼ to ½ prem. Rossa Grande, ⅛ to ¼ per share. Frontino, ⅛ to ¼ per share. Port Phillip, 15-16ths to 1 1-16th per share. Taquaril, ¼ to 1 prem. In British Mines a small amount of business has been done. Prince of Wales shares were driven down to 52s., 54s., but have recovered to 55s., 57s. Chiverton Moors are 5¼ to 5½; Chiverton, 7 to 7¼. West Chiverton, 66 to 67; the report from the latter mine is very good. The rich course of ore in the 70, which has continued for about 200 fathoms, is a feature almost without precedent in mining, and the improving course of ore in the 90, 100, and 110 proves the property to be of the most established character. The meeting will be held next month. Great Laxeys have fallen, and are more offered. At Westminster the lode in the 70 is valued at 2½ tons per fm.; the eastern shaft at 1 ton. Great Vor 16¼ to 17.

The SAO VICENTE MINING COMPANY, with a capital of 37,500*l.*, in shares of 10s. each, has issued its prospectus, the object of the undertaking being to take over and develope the extensive gold mining property lately belonging to the East del Rey Company. Of the 75,000 shares into which the capital is divided, 37,200 are to be appropriated to the holders of the East del Rey shares, and the remainder are to be offered to the public, with a preferential bonus of 20s. per share. The prospectus will be found in another column.

At Truro Ticketing, on Thursday, 2116 tons of ore were sold, realising 10,291*l.* 1s. 0d. The particulars of the sale were:—Average standard, 100*l.* 6s. 0d.; average produce, 7⅛; average price per ton, 4*l.* 17s. 6d.; quantity of fine copper, 160 tons 11 cwts. The following are the particulars of the sales during the past month:—

Date.	Tons.	Standard.	Produce.	Per ton.	Per unit.	Ore copper.
June 27	1692	£105 17 0	7¼	£5 5 0	13a11½d.	£69 8 0
July 4	2355	105 10 0	7⅜	5 7 0	13 11½	69 16 0
" 11	1457	109 15 0	6½	3 19 0	12 11	64 16 0
" 18	4139	109 17 0	6¼	4 2 0	13 1¼	65 16 0
" 25	2116	100 6 0	7⅛	4 17 6	12 10	84 2 0

Compared with last week's sale, the decline has been in the standard 2*l.* 5s., and in the price per ton of ore about 4s. Compared with the corresponding sale of last month, the decline has been in the standard 5*l.*, and in the price per ton of ore about 7s.

The directors of the Devonshire Great Consolidated Copper Mining Company, at their board meeting, held yesterday, declared a dividend of 716*l.*, being 7*l.* per share, arising from profits on sales of copper ores sampled in the months of March and April last. After payment of the same there remains in hand a balance of 19,006*l.* 7s. 1d. in cash, ore bills not at maturity, and reserve fund applicable to the general purposes of the company.

At the Frank Mills Mine meeting, at Exeter, on July 19 (Mr. W. Porter in the chair), the accounts showed a credit balance of 538*l.* 16s. 6d. Mr. Wescomb tendered his resignation as purser, and Mr. Harris (of Exeter) was appointed to the position. The agent's report stated that, from the present appearance of the mine in general, they consider their prospects were rather improved, and hoped, therefore, to somewhat increase the returns. The total number of persons employed was 189.

At Wheal Buller meeting, on Wednesday, the accounts showed—Cost and bills, 1862*l.* 9s. 10d.—By sales of tin, 1604*l.* 18s.; copper, 89*l.* 16s. (less dues); other receipts, 48*l.* 16s. 7d.—1687*l.* 0s. 10d.: leaving a loss of 175*l.* 9s.; balance at the end of April, 103*l.* 9s.: leaving a balance against the adventurers of 278*l.* 18s. The aggregate value of the ends, stopes, rises, &c., is 207*l.*; and the agents conclude the report with—"We consider the prospects of the mine are very encouraging."

At West Basset Mine meeting, on Wednesday, the accounts for April and May showed a debit balance of 898*l.* 1s. 6d., to meet which there was arrears of calls 938*l.* Capt. George Lightly reported upon the various points of operation.

At Wheal Agar meeting, on Thursday (Mr. C. J. Furlonger in the chair), the accounts, for May and June, showed a credit balance of 20*l.* 4s. 1d. A call of 3s. per share was made. Capt. Edward Rogers reported upon the various points of operation.

At Cook's Kitchen Mine meeting, on July 18, the accounts showed a debit balance of 450*l.* 5s. A vacancy having occurred in the agency of the mine by the retirement of Capt. Craise, it was resolved that Capt. Francis Gilbert, jun., be appointed agent, at a salary of 8*l.* 8s. a month; that Capt. Josiah Thomas be associated with his father in the management of the mine; and that Capt. Pearce be appointed to superintend the dressing of tin at a salary of 2*l.* 2s. per month. Capts. Charles Thomas and Charles Thomas, jun., say—"The stopes and pitches are producing about the same quantity of tin as for some time past."

At the Wheal Emily Henrietta meeting, on July 15, the accounts showed a debit balance of 546*l.* 9s. 2d. A call of 15s. per share was made. The report stated that, on the whole, the mine was looking very promising. The next sampling was estimated to be about 40 tons of ore.

At the North Devon Silver-Lead Mine meeting (Mr. J. Hickman in the chair) a call of 1s. per share was made. Thanks were voted to the directors for their services in conducting the affairs of the mine during the past year. Messrs. Richard Matthews, Joseph Staples, G. Westcombe, and J. E. Lucas were re-elected directors; and Mr. Burdas was elected to a seat at the

board. The special resolution that the North Devon Silver Mining Company be forthwith wound-up voluntarily was rejected by a large majority. The thanks of the meeting were accorded to Mr. Filder for his efficient services as secretary, and a similar vote was passed to Mr. Talbot, the solicitor.

At San Pedro del Monte Mining Company meeting (Mr. A. Calder in the chair) it was resolved to increase the capital of the company by the issue of 10,000 new shares of 1*l.* each, bearing a preferential dividend of 20 per cent. Nearly 4000 shares have been subscribed for.

At the Val Antigoria Gold Mine meeting, yesterday (Mr. Staunton in the chair), the balance-sheet was received and adopted. Details in another column.

At the Scottish Australian Investment Company meeting, yesterday (Mr. C. Whetham in the chair), a dividend at the rate of 10 per cent. per annum was declared. Details in another column.

The Bank of England returns for the week ending on Wednesday evening was again favourable, and the minimum rate of discount was consequently reduced ½ per cent. on Thursday morning. In the ISSUE DEPARTMENT there is shown a decrease in the "notes issued" of 1700*l.*, represented by a corresponding decrease in the coin and bullion on the other side of the account. In the BANKING DEPARTMENT there is shown there has been a decrease in the "other deposits" of 119,712*l.*, and in the "seven day and other bills" of 12,253*l.*, together, 131,965*l.*; and an increase in the "public deposits" of 78,874*l.*; and in the "rest" of 6926*l.*; together, 85,800*l.* = 46,165*l.*, which, deducted from 328,018*l.*, the decrease in "other securities" on the asset side of the account, leaves an increase in the total reserve of 281,853*l.*

On the Stock Exchange a moderate amount of business has been transacted in Mining Shares during the week. The following prices were officially recorded in British Mining Shares:—East Caradon, 5½; Prince of Wales, 2⅞, 3, 2⅞, 2⅞, 2⅞; Great Wheal Vor, 17¼; Providence, 26; North Wheal Crofty, 3 7-16ths.—In Colonial Mining Shares the prices were:—Port Phillip, 1, 15-16ths; Cape Copper, 7 9-16ths; Scottish Australian, 1; Yudanamutana, ¼.—In Foreign Mining Shares the prices were:—Chontales, 4¾, 4½, 4¾, 4¾, 4 13-16ths; Don Pedro, 3¼, 2¾, 3, 2⅞, 1⅞, 1¾, 1⅞, 2 prem.; Frontino and Bolivia, 4; Lusitanian, 2¾; Rossa Grande, ¼; St. John del Rey, 57, 56, 54; United Mexican, 2, 1¾.

COAL MARKET.—The arrivals this week amount to 163 ships. For household coals business has continued very active, and a further rise in price of 9d. per ton has been established. Hartley's have remained steady at the late quotations. Hetton Wallsend, 21s. 3d.; Haswell Wallsend 21s.; South Hetton Wallsend, 21s.; East Hartlepool, 20s. 9d.; Kelloe Wallsend, 19s. 9d.; Kepier Grange Wallsend, 19s. 6d.; Hetton Lyons Wallsend, 18s. 6d.; Tunstall Wallsend, 18s. 6d.; West Hartley, 17s. 6d.—Unsold, 1: 25 ships at sea.

CONTRACTS FOR COAL.—The Admiralty require the supply of 5000 tons of Smokeless South Wales Coal for the steamships at Jamaica; they also require 2000 tons of the same description of Coal, to be delivered at Sierra Leone; and 1500 tons of the same description, to be delivered at Jellah Coffee, Bight of Benin. The South-Eastern Railway Company require the supply of 90,000 tons of Coking Coal.

EXPORTS OF COAL.—By the Monthly Circular of Messrs. Higginson, Liverpool, we learn that the quantity of coal exported in June was 865,923 tons, against 870,958 tons in the corresponding month of 1866, showing a decrease of 5035 tons. The particulars are—From the Northern ports, 472,971 tons; Yorkshire, 27,844 tons; London, 3072 tons; Liverpool, 45,670 tons; Severn ports, 259,184 tons; and Scotch, 57,182 tons. The increase was—Northern ports, 20,734 tons; Severn ports, 137 tons; Scotch ports, 8946 tons. The decrease—Yorkshire, 9188 tons; London, 1740 tons; Liverpool, 23,924 tons. Total January to June, 4,467,524 tons; same time last year, 4,482,160 tons—showing a decrease of 14,636 tons.

THE COPPER TRADE.—Messrs. Vivian, Younger, and Bond (July 26) say:—Business has been almost at a stand-still during the past week, buyers having come forward only to fulfil actual requirements. In Chili produce the only transactions have been a cargo of regulus in second hands sold at 13s. 6d. per unit, and 55 tons of bars at 61*l.* 5s. per ton, coupled with some unusual conditions. The latter does not, therefore, indicate the actual market value. Importers appear to be firm at 68*l.*, but buyers are not disposed to offer 67*l.* 10s. for any quantity. English copper is rather weaker, and holders are more inclined to meet buyers, who, however, abstain from purchasing unless on very advantageous terms. In fine foreign sorts there is no business of any interest to record.

CONCRETE FUEL.—Mr. Roberts, whose invention for the utilisation of small coal was referred to in last week's Journal, has forwarded to our office a sample of the fuel which he produces, and which is, undoubtedly, equal both in strength and appearance to any that has been produced by more expensive processes. The cost of the lime used is, of course, quite nominal, whilst it is found in practice that not only does the application of the lime increase the heat-giving properties of the fuel, but that in the proportions in which it is used the lime is completely consumed with the coal, the concrete fuel leaving scarcely any ash—indeed, not any more than is due to the small coal from which it is manufactured. No machinery whatever is required; and the addition of 3s. per ton to the cost of the small coal suffices to place the manufactured fuel in the vessel or in the railway truck, for conveyance to the place of consumption.

SEWING MACHINES.—The Wheeler and Wilson Company, of New York, manufacturers of American sewing machines (of which they sell annually 82,000 to customers), have received the Gold Medal at the Exposition Universelle, for the good construction of machines; the new improvement for making button-holes, applicable to their sewing machines; also, for their machine especially for making button-holes.

MANUFACTURE OF GAS AND FUEL.—Messrs. TOMLIN and HOOK, of Greenwich, applied for, but were, of course, refused, provisional protection for "all improvements that may hereafter be made under the before-mentioned principles," which principles are declared to be the employment of the same kind of apparatus as is commonly employed in the manufacture of gas from coal, and the production of the gas from any hydro-carbon liquid or solid other than coal in the ordinary acceptation of the term.

THE WHITEWELL LEAD MINE COMPANY.—On Thursday last the shareholders in this successful company received their dividends of 10s. per share on the paid-up capital of 5s. per share. The extraordinary success which has followed the prosecution of the idea of the existence of lead in this district may be judged from the fact that since the beginning of last year, when the working staff was organised and commenced operations, besides paying the dividend above named, there have been erected 11 cottages, all the required stables and outbuildings; upwards of a mile of road has been made in a hilly and somewhat difficult country, the necessary plant and fixings have been acquired, and that all the above outlay has been paid for. By many the company is considered only in its infancy, as no conjecture can be formed of the extent to which the production of the mine can be developed: 20*l.* is about the price of the 5s. shares.—*Preston Guardian.*

A NEW COAL AND CANNEL COMPANY.—A coal company (limited) is being incorporated, with a capital of 17,000*l.*, in 3400 shares of 5*l.* each, for the purpose of acquiring and working the seams of coal, cannel, cannel shales, ironstones, and fire-clays lying under about 103 acres of land situate at Pentre, near Mold, and under any intermixed or adjacent lands. A provisional contract has been entered into for the purchase of the leases, with the shafts, plant, and machinery, for 9000*l.* (a most favourable purchase for the company); and after having improved the mining operations at a cost of 6000*l.*, it is confidently calculated that a profit of 5200*l.* per annum will be realised, which will pay a dividend of 20 per cent. upon the capital. This is an excellent scheme for capitalists, and we have no doubt it will be handsomely supported. The directors consist of well-known and highly influential gentlemen:—Messrs. James Maurice, J.P. and D.L. for Denbighshire, Ruthin, North Wales; William Henry Hitchcock, J.P. and D. L. for Wilts and Gloucestershire, Miserden Park, Cirencester, Gloucestershire; J. H. Crawford, Chauntrey House, Maidenhead; Thos. Codrington, F.G.S., Asso. Inst. C.E., 5, Norland-square, Notting-hill, London, W.; and Alfred William Maberley, the Spa, Gloucester, and 17, Exeter Hall, Strand, London.—*North Wales Chronicle.*

Contract for Coals for Jamaica.

CONTRACT DEPARTMENT, ADMIRALTY, SOMERSET HOUSE.

THE COMMISSIONERS for Executing the Office of Lord High Admiral of the United Kingdom of Great Britain and Ireland, do hereby give notice that, on TUESDAY, the 20th August next, at Two o'clock, they will be READY to TREAT with such persons as may be willing to CONTRACT for SUPPLYING and DELIVERING into store at Her Majesty's Naval Yard at Jamaica,

FIVE THOUSAND TONS OF SMOKELESS SOUTH WALES COALS, fit for the service of Her Majesty's steamships and vessels.

A form of the tender and conditions of contract may be seen in the lobby of the Storekeeper-General's Department, Admiralty, Somerset House. No tender will be received after Two o'clock on the day of treaty, nor will any be noticed unless the party attends, or an agent for him duly authorised in writing.

Every tender must be addressed to the Secretary of the Admiralty, and bear in the left-hand corner the words "Tender for Coals for Jamaica," and must also be delivered at the Department of the Storekeeper-General, Admiralty Somerset House, accompanied by a letter signed by two responsible persons engaging to become bound with the person tendering in the sum of £25 per cent. on the value for the due performance of the contract.

By order, ANTONIO BRADY,
Registrar of Contracts and Public Securities.
Contract Department, Admiralty, Somerset House, July 24, 1867.

Contract for Coals for Sierra Leone.

CONTRACT DEPARTMENT, ADMIRALTY, SOMERSET HOUSE.

THE COMMISSIONERS for Executing the Office of Lord High Admiral of the United Kingdom of Great Britain and Ireland, do hereby give notice that, on TUESDAY, the 20th August next, at Two o'clock, they will be READY to TREAT with such persons as may be willing to CONTRACT for SUPPLYING and DELIVERING into store at Sierra Leone,

TWO THOUSAND TONS OF SMOKELESS SOUTH WALES COALS, fit for the service of Her Majesty's steamships and vessels.

A form of the tender and conditions of contract may be seen in the lobby of the Storekeeper-General's Department, Admiralty, Somerset House. No tender will be received after Two o'clock on the day of treaty, nor will any be noticed unless the party attends, or an agent for him duly authorised in writing.

Every tender must be addressed to the Secretary of the Admiralty, and bear in the left-hand corner the words "Tender for Coals for Sierra Leone," and must also be delivered at the Department of the Storekeeper-General, Admiralty, Somerset House, accompanied by a letter signed by two responsible persons, engaging to become bound with the person tendering in the sum of £25 per cent. on the value for the due performance of the contract.

By order, ANTONIO BRADY,
Registrar of Contracts and Public Securities.
Contract Department, Admiralty, Somerset House, June 24, 1867.

Contract for Coals for Jellah Coffee, Bight of Benin.

CONTRACT DEPARTMENT, ADMIRALTY, SOMERSET HOUSE.

THE COMMISSIONERS for Executing the Office of Lord High Admiral of the United Kingdom of Great Britain and Ireland, do hereby give notice that on TUESDAY, the 20th August next, at Two o'clock, they will be READY to TREAT with such persons as may be willing to CONTRACT for SUPPLYING and DELIVERING on board Her Majesty's ship Vindictive, Coal Depôt, at Jellah Coffee, Bight of Benin,

FIFTEEN HUNDRED TONS OF SMOKELESS SOUTH WALES COALS, fit for the service of Her Majesty's steam-ships and vessels. Five hundred tons of the above quality, or such portion thereof as may not be received on board the Vindictive, is to be delivered into store at Fernando Po.

A form of the tender and conditions of contract may be seen in the lobby of the Storekeeper-General's Department, Admiralty, Somerset House. No tender will be received after Two o'clock on the day of treaty, nor will any be noticed unless the party attends, or an agent for him duly authorised in writing.

Every tender must be addressed to the Secretary of the Admiralty, and bear in the left-hand corner the words "Tender for Coals for Jellah Coffee," and must also be delivered at the Department of the Storekeeper-General, Admiralty, Somerset House, accompanied by a letter signed by two responsible persons, engaging to become bound with the person tendering in the sum of £25 per cent. on the value for the due performance of the contract.

By order, ANTONIO BRADY,
Registrar of Contracts and Public Securities.
Contract Department, Admiralty, Somerset House, July 24, 1867.

India Office—Contract for Iron.

BY ORDER OF THE SECRETARY OF STATE FOR INDIA IN COUNCIL.

NOTICE IS HEREBY GIVEN that the DIRECTOR-GENERAL OF STORES FOR INDIA will be READY on or before Monday, the 29th instant, to RECEIVE PROPOSALS, in writing, sealed up, from such persons as may be willing to SUPPLY—

BEST BRITISH IRON,

And that the conditions of the said contract may be had on application, addressed to the Director-General of Stores, India Office, Cannon-row, Westminster, where the proposals are to be left any time before Two o'clock P.M. of the said 29th instant, after which hour no tender will be received.

GERALD C. TALBOT, Director-General.
India Office, July 19, 1867.

South Eastern Railway Company—Contract for Coking Coal.

SOUTH EASTERN RAILWAY COMPANY.—The Directors of the South Eastern Railway Company are PREPARED to RECEIVE TENDERS for the SUPPLY of—

NINETY THOUSAND TONS OF COKING COAL,

to be delivered free on board at the port of shipment, or in the ports of Folkestone, Whitstable, and Strood.

Forms of tender may be had on application to this office, and sealed tenders to be sent in on or before Tuesday, the 6th August next, endorsed "Tender for Coking Coal," and delivered to the undersigned. THOS. A. CHUBB, Sec.
Secretary's Office, London Bridge Station, July 25, 1867.

GREEN SLATES.

British Association for the Advancement of Science.

BRITISH ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.—The NEXT ANNUAL MEETING of the Association will be HELD, under the Presidency of His Grace the Duke of BUCCLEUCH, K.B., F.R.S., &c., at DUNDEE, commencing on WEDNESDAY, Sept. 4.

Notices of Papers proposed to be read at the meeting should be sent to the Assistant-General Secretary, G. GRIFFITH, Esq., Harrow.

Members and others, who wish to obtain information about the local arrangements, are requested to communicate with the local secretaries at Dundee.

LEAD ORES.

Date.	Mines.	Tons.	Amount.	Purchasers.
July 19	Great Laxey	100	£22 0 0	Panther Lead Co.
24	Black Craig	30	12 8 6	Walker, Parker, & Co.
25	Wheal Mary Ann	60	24 6 6	Michell and Son.

BLACK TIN.

Date.	Mines.	Tons.	c.	q.	lbs.	Price p. ton.	Amount.	Purchasers.
July 20	Penhalls	11	17	1	0 ..	—	£ 625 15 0	—
	Kitty (St. Agnes)	30	14	1	14 ..	—	1612 14 8	—
22	ditto	3	11	1	8 ..	—	189 0 0	—

COPPER ORES.

Sampled July 10, and sold at the Royal Hotel, Truro, July 25.

Mines.	Tons.	Price.	Mines.	Tons.	Price.
South Caradon	82	£6 2 0	North Treskerby	50	£3 17 0
ditto	71	4 0 6	ditto	44	4 6 0
ditto	61	3 16 0	ditto	43	5 6 0
ditto	59	7 4 6	ditto	42	5 5 6
ditto	56	13 4 6	Phœnix Mines	84	3 3 0
ditto	53	10 14 6	ditto	80	3 3 0
ditto	48	12 18 6	ditto	20	7 1 0
ditto	42	6 8 0	ditto	3	6 6 6
Clifford Amalgamated	84	6 16 6	Craddock Moor	53	3 18 6
ditto	82	1 11 6	ditto	46	4 6 6
ditto	81	4 6 0	ditto	45	7 0 0
ditto	72	1 11 6	ditto	12	1 16 0
ditto	46	3 4 6	West Caradon	50	4 8 0
ditto	40	4 2 0	Fursdon	49	4 18 6
ditto	30	2 8 0	ditto	9	1 17 6
ditto	15	3 7 0	Glasgow Caradon	57	2 13 0
Wheal Rose	63	4 19 0	ditto	43	2 15 6
ditto	58	5 0 0	Wheal Polharmon	42	3 16 6
ditto	48	3 13 6	St. Day United	29	4 3 6
ditto	47	4 18 6	Hallenbeagle	26	2 18 0
ditto	43	5 0 0	Great Wheal Busy	12	1 8 0
ditto	41	5 14 0	Wood Mine	3	2 15 6
North Treskerby	52	4 0 6			

TOTAL PRODUCE.

South Caradon	472	£3642 5 6	Glasgow Caradon	100	£ 270 7 6
Clifford Amalgam	450	1598 15 0	Wh. Polharmon	42	160 13 0
Wheal Rose	300	1458 8 6	St. Day United	29	121 1 6
North Treskerby	231	1040 9 0	Hallenbeagle	26	75 8 0
Phœnix Mines	187	676 11 6	Great Wheal Busy	12	16 16 0
Craddock Moor	156	743 11 5	Wood Mine	3	8 6 6
West Caradon	108	478 4 0			

Average Standard ..... £109 6 0 | Average Produce 75¾
Average Price per ton £4 17 6
Quantity of Ore ..... 211c tons | Quantity of Fine Copper, 160 tons 11 cwts.
Amount of Money £10,290 17 6
LAST SALE.—Average Standard ..... £109 17 0.—Average Produce 61¼
Standard of corresponding sale last month, £105 17 0.—Produce, 71¼.

COMPANIES BY WHOM THE ORES WERE PURCHASED.

Names.	Tons.	Amount.
Vivian and Sons	410	£1575 2 6
Freeman and Co.	106½	442 16 0
Grenfell and Sons	285½	1897 8 6
Sims, Willyams, and Co.	252	914 17 0
Williams, Foster, and Co.	493½	2885 4 6
Mason and Elkington	124½	622 18 6
Bankart and Sons	140½	505 7 9
Copper Miners' Company	143½	664 4 9
Charles Lambert	148	761 6 0
Goole Alum Company (Limited)	12	21 12 0
Total	2116	£10,290 17 6

Copper ores for sale at Tyack's Hotel, Camborne, on Thursday next.—Mines and Parcels.—Wheal Seton 885—Clifford Amalgamated 601—West Wheal Seton 567—South Crofty 372—West Tolgus 337—Wheal Basset 141—East Pool 128—East Grenville 92—Dolcoath 25—East Basset 20—Wheal Grenville 16—North Dolcoat 5.—Total, 3189 tons.

Copper ores for sale at Tabb's Hotel, Redruth, on Thursday week.—Mines and Parcels.—Prosper United 412—East Carn Brea 212—Carn Brea 160—Par Consols 145—Rosewarne United 105—Crenver and Abraham 85—Levant 75—North Downs 41—Boscaswell 35—Mellanear 28—South Dolcoath 26—Tywarnhale 20—Rosewarne Consols 17—Harmony and Montague 10.—Total, 1391 tons.

Some of the mining agents selling their copper ores on the second Thursday in each month having (in consequence of the small quantity now produced in the western part of the county) intimated a desire to amalgamate the western sale with some other, and, seeing that the last sale in the month is also usually small, Mr. Brydges Williams asked permission of the Chairman, Mr. Peter Clymo, and others at the Ticketing of July 25 (as a considerable saving would be effected), to consent to such amalgamation, and this was generally agreed to; the scheme is, therefore, before the miners for their consideration until the 8th proximo, when interested agents are solicited to attend the Ticketing of that day to consider and determine hereon.

"BULLS" AND "BEARS."—We have *never* made a report of the Prince of Wales Mine *ourselves*, much less "appended our names to one." All we have done is to call attention to the agents' reports, and the deductions to be drawn from them, and advising the shareholders to rely upon them in preference to casual inspectors. In June last the mine was inspected for the Duchy of Cornwall, on behalf of His Royal Highness the Prince of Wales, the lessor, and the inspector, in *justice to Captain Gifford*, wrote the secretary *(to whom he was a stranger)* to congratulate him and the shareholders on "the great success and eminent prospects of "*a good and lasting mine.*" These were his very words; and he added, after referring to the rich lode in the 45 west, "*in the level below (55) it is equally valuable, and even richer in places, and it has every appearance of continuing in depth.*" Could there be a more independent and unbiassed report than this? It confirmed everything Capt. Gifford had stated, and made our confidence more assured; and as he (Captain Gifford), notwithstanding the temporary falling off in the ends, is as sanguine as ever as to the future, we believe the shareholders are fully justified in still relying upon him. It must be remembered that its enemies began their work when shares were at 10s. or 15s. each, and ever since that time have as persistently predicted its failure: but it went on steadily improving in prospects and price, and in direct contradiction to the prophecies of the "unbiassed;" and now that the ends show a slight falling off the "combination" to get down the price of shares is in full force, and not very particular as to the means employed. Many of the latest "*ghosts*" are as false as those that preceded them, and unworthy of serious notice. We still advise *buying* and not *selling*, and a few weeks, *perhaps a few days*, may probably show our reasons for the advice, as well as for the unscrupulous and desperate means taken last week, by a combination of the "bears," to knock down the price, and frighten the holders out of their shares. "D. P." is quite right in saying that the person referred to would not take the trouble of sending his lucubrations to strangers unless he had pecuniary motives for doing so. The geological features of the mine are as different as possible from those of Wheal Edward, Wheal Arthur, and Zion; and to use the words of one of the oldest agents in the district, "one might as well make a comparison between a mine in South Africa and the Prince of Wales, as between the Prince of Wales and Edward, Arthur, and Zion," so distinct are their characteristic features to those who understand anything of mining.

"A SHAREHOLDER."—Do not by any means sell. There are three good points coming off at East Caradon before Christmas, and in looking at them we must remember that the South Caradon lodes are being worked rich towards East Caradon, through which sett they run. The first point is this—the south lode, which has been rich and promising, is underlying fast towards the caunter, and by October next will, it is expected, form a junction with it at the 115 fm. level. No. 2 Seccombe's lode is expected to be at the 65 fm. level before Christmas; near surface this was the finest lode in the sett. In No. 3 a cross-cut is every day expected to intersect No. 2 north lode at the 50 fm. level.

"H. S."—The statement is absolutely false.

Notices to Correspondents.

*** Much inconvenience having arisen in consequence of several of the Numbers during the past year being out of print, we recommend that the Journal should be *filed* on receipt: it then forms an accumulating useful work of reference.

ZOPISSA.—Will any reader kindly inform me if Zopissa ever came to a commercial reality? It is stated that pipes, baths, cisterns, &c., have been made, besides the description of it as a cement; but I cannot hear of its sales or use anywhere.—P.

AMALGAMATION.—Can any of your readers inform me whether, if a liquid mixture of gold (specific gravity=19·34) and mercury (specific gravity=13·595) is left undisturbed (say, in the shape of a column contained in a cylindrical vessel) for some time, the part of the amalgam near the *base* of the column is, or is not, *richer* in gold than the part near the top of the column?—G. J. G.

ROSEWARNE CONSOLS.—The 78 and 80 west are said to be within about 16 fms. of the junction with a caunter lode, and about 95 fathoms from a shaft at the boundary of Wheal Unity; ore has been worked on the caunter and at the boundary shaft, and it is now coming into the two ends (70 and 80), which are draining the shaft, though 95 *fms.* distant. Will any of your readers kindly inform me whether it is expected that the caunter will simply intersect the main lode, or that the two will unite and form a good lode at about 90 fms.? A reply will greatly oblige—W.

DON PEDRO NORTH DEL REY.—"A Shareholder" is quite in error. No information is withheld by the directors; on the contrary, everything is readily communicated, both through the newspapers and at the office. An epitome of the latest despatches appears in another column of this day's Journal.

FRONTINO AND BOLIVIA (SOUTH AMERICAN) GOLD MINING COMPANY.—Could any reader inform the shareholders of this company when they may expect a report from Messrs. Payne and Sangster, the inspectors appointed to examine into the affairs of the company, and who were directed to report the results of their investigation to the shareholders? There is no doubt those respectable gentlemen will endeavour thoroughly to perform the duties which they have been appointed to discharge, and will thereby relieve the anxiety of the shareholders, and entitle themselves to their gratitude.—A LARGE SHAREHOLDER.

WEST TRELAWNY.—Your correspondent should by this time have received a circular letter from me, which would answer his queries. If by any chance this should not have reached him, I beg to say he can obtain every information by applying to me.—CHARLES WARWICK, Liquidator: 25, *Bucklersbury*.

NEW TRELAWNY.—Would the agent be good enough to send a report to the *Mining Journal*, at least once a month, as no report has appeared since the meeting, and it is only by that means distant shareholders can obtain information?—A SHAREHOLDER.

WHEAL TREVENNA, AND ITS MANAGEMENT.—From time to time shareholders have complained of the management. It is well known that the directors had unforeseen difficulties to encounter, which took both time and money, and which every shareholder has been informed of. Those who wish for further information I beg will take the trouble to write to the agent at the mine, as I did myself, and that gentleman, I am sure, will satisfy any shareholder as to the past management and future prospects; and to those who exercise a little more patience, and that without grumbling, I have not the slightest doubt the reports, both of the directors and the agents of the mine, will be fully verified; and those who have taken shares as an investment will be well compensated for their outlay.—A SHAREHOLDER FROM THE FORMATION OF THE COMPANY.

THE MINING JOURNAL,
Railway and Commercial Gazette.

LONDON, JULY 27, 1867.

LIMITED LIABILITY COMPANIES, AND THEIR PROMOTERS.

That there are some companies launched for the development of projects which do not possess the elements of success cannot be denied, but by far the larger number can trace their misfortune either to dissension amongst the promoters, or to the desire of some comparatively disinterested individual to reap pecuniary advantage from the legal costs of winding-up. Under these circumstances the judgment of Vice-Chancellor Sir. R. MALINS will be particularly interesting to a large number of shareholders. The case was that of the Venallt Steam Coal Company, which was formed in 1864, with a capital of 15,000*l.*, in shares of 10*l.* each. The petitioner to wind-up the company was Mr. ARTHUR OWEN DAVIES, one of the original promoters, and the company's engineer. He was the holder of 39 fully-paid shares, and claimed 57*l.* as balance of account due to him, the ground of the petition being that the company was unable to pay its debts, and had ceased to carry on its business for a whole year. Mr. SPEED (instructed by Mr. JAMES KEMPTHORNE, solicitor, Neath) appeared in support of the petition; Mr. EVERITT (instructed by Messrs. TUCKER and NEW, solicitors), in opposition to the petition, appeared for every other shareholder.

The company was a small proprietary of individuals, ten in number only. They were principally gentlemen of well-known wealth and social position, who, trusting to the truth of the representations in the report of the petitioner, had found capital to develope the undertaking. With regard to the alleged debt of 57*l.*, he denied that there was due to the petitioner one shilling. He had been overpaid, and was in debt to the company: no demand of payment had ever been made against the company; the first that was heard of the alleged debt was the statement in the petition: while in December last the petitioner had written to the managing director of the company a letter (exhibited with the affidavits) which acknowledged with thankfulnes the receipt of a cheque for 10*l.*, "as a loan to be returned." In delivering judgment, the VICE-CHANCELLOR said:—

"The petitioner presents his petition in a twofold character—first, as a shareholder; and, secondly, as a creditor. It appears that he held no shares (except two, perhaps, in respect to which he may have paid two small sums of money) which were not fully paid up. Otherwise the only shares he held are those allotted to him as a remuneration for services prior to the incorporation of the company, all of which shares are paid up in full. As a general rule, a shareholder coming forward to wind-up a company, whose shares are paid up in full, has no *locus standi* in this Court, unless he can show that the result of the winding-up will be to confer some benefit upon him by distributing amongst the shareholders some portion of the assets of the company. He has no interest in winding-up as regards expenditure, because upon a shareholder so situated no demand can be made. If this is not a company making profit, that is perfectly unimportant to this petitioner, for he cannot be called upon to contribute to losses. If the company is going on losing money, but has property now unconverted which may produce a surplus, so that there will be a distribution amongst the shareholders, then he would have an interest in winding-up. But before I attend to the application of a shareholder in such a position, I should at least expect very strong evidence to show that the result of the winding-up of the company would be to produce a surplus over and above the debts and liabilities of the company. Not only is there no such evidence here, but there is not even an allegation to that effect. I am, therefore, bound, as far as regards his character as a shareholder, wholly to disregard the application. Then he comes forward as a creditor of the company, and he says the company is indebted to him in a sum of 57*l.* for work and labour done and money paid. The company deny their indebtedness. As a general rule, when a debt is contested, the proper course would be to allow the petition to stand over, in order to give the petitioner an opportunity of proving his debt. At first I was under the impression that that was the proper course in this case, and was inclined to let the petition stand over, in order that he might bring an action to try the fact of debt. But having heard the evidence, I am bound to come to the conclusion that the company does not owe him a penny. And, moreover, I come to the conclusion that it is impossible this gentleman when he presented the petition could have believed the company owed him a penny, because I find he sends in his own statement of accounts after the termination of his service on Dec. 24, 1865; and all he demanded was 183*l.* 10s., plus a balance of 19*l.* 10s. for travelling and other expenses, making the total 203*l.* He leaves it to the company to say what they have paid him. The company immediately sent in a counter account, by which it appears that they have paid him 200*l.* by cheques, and they owed him only 183*l.* 6s. 8d.; but as a matter of compassion, and to settle the account, they are willing to give him credit for the sum of 16*l.* 13s. 4d. to defray the travelling expenses. Against that no remonstrance was made, no account was sent in, no demand was ever made by this gentleman, and I think it is the height of impropriety for any man to come forward as a creditor of a company and endeavour to wind them up without having made a demand, or sent in an account of his debt, giving an opportunity to meet it before he presents his petition. If he believed himself to be a creditor for 57*l.* he was bound to send in an account before he presented his petition, and without doing that he is not entitled to maintain such a position; because no company, according to this Act of Parliament, is to be deemed unable to meet its debts unless it is indebted to a particular person 50*l.*, and the creditor has made a demand before presenting the petition, and three weeks have elapsed without that demand being satisfied. If this gentleman were a creditor, I should be bound to dismiss this petition, because he has not complied with the Act of Parliament. Therefore, not only on that ground, but because I do not believe there is a penny due to him, or that the petitioner himself believed that anything was due, and because I regard the petition as one of the most vexatious that ever was presented, and that it never ought to have been presented, it must be dismissed with cost."

The justice of the VICE-CHANCELLOR'S decision will be universally acknowledged, whilst many will regret that he could not go still further, and decide that the holders of paid-up shares should in no case be permitted to promote the winding-up of a company, unless they shall have paid the full par value of the shares in actual cash. Although it may appear, theoretically, that the paid-up shares, representing the purchase-money of the property, should be considered equivalent to shares actually paid upon in cash, it cannot be denied that, practically, there is no justice in classing promoters and ordinary shares as identical, since, in the present state of the law, the promoter is frequently both buyer and seller, settling the price to be paid and the mode of payment to suit his own views; the directors who theoretically represent the shareholders, are practically the mere nominees of the promoter, and are openly offered the option before the issue of the prospectus of accepting the promoter's terms or withdrawing. If matters go on smoothly, the company may ultimately attain a healthy condition, but if there be any hitch in the arrangements, or if the project be less favourably received than was anticipated, the promoters and directors disagree, and the company is plunged into litigation, and but for such decisions as that of Vice-Chancellor MALINS, the shareholders alone would suffer for the unhealthy state of affairs which the law permits.

THE SUPPLY OF COAL TO LONDON.

Nothing is more suggestive of the actual state, the rise and fall of our mineral-producing districts than the statistics relating to the supply of coal to the metropolis. Within the last thirty years the sea-borne coal was all powerful in London, having but few competitors; but now the fine "Wallsends" are fast giving way to the Derbyshire, Yorkshire, and other seams, carried by railway. Indeed, there appears no great reason why the former coal should not be in a great measure superseded. Looking at the returns for the last few years, we find the railway traffic has been gradually sapping that by sea. So far back as October last the quantity entered by sea was 243,887 tons, against 229,013 by land; but since then there has been a considerable fluctuation in the carriage, but all with a tendency against sea-borne coal. For the half-year ending June the entire quantity carried over sea into London was 1,454,693 tons, against 1,488,973 tons for the corresponding period of 1866, showing a decrease of 32,480 tons. On the other hand, there was carried by railway during the half-year 1,567,553 tons, against 1,413,100 tons for the same period of 1866, showing an increase of 154,453 tons.

Considering that the coal fields of Northumberland and Durham are defined, whilst those of Derbyshire, Yorkshire, &c., are unexplored, there is very little doubt as to the future sources on which the metropolis will have in a great measure to depend. In that mighty coal field, as it has been forcibly termed, extending from Nottingham to Leeds, fine seams of coal are worked from one extremity to the other; and, aided by the best facilities there can be afforded by various lines of railway, they will be the great producing centres from which London will have to be supplied. The Derbyshire coal field, in particular, promises to become a feeder of no ordinary character, seeing that it is possessed of many advantages of which very few coal-producing localities can boast, producing a gas coal fully equal to any that can be found in Yorkshire. It is fully 2s. 3d. per ton nearer London, so far as carriage is concerned. In common also with other parts of the coal field, there is a valuable bed of ore, some of it known as the black ironstone, unrivalled by any clay-band ironstone in England. With those facts in view, there is every prospect that Derbyshire must ultimately become—and that, indeed, in a very short time—the principal coal purveyor to the metropolis. Already it supplies fully two-fifths of all the coal carried by rail into London, and taking its present produce at 5,400,000 tons per annum, there is no reason why that quantity should not be increased fully 33 per cent. in the next seven years.

At present, in all parts of the country, new mines are being opened. The vast coal fields lying beneath the estates of the Duke of DEVONSHIRE, at Staveley and Clay Cross, and other places, are being rapidly developed. Both the companies at the places named are under the management of two gentlemen of great energy and ability, and both would appear to be vieing with each other in developing the vast mineral wealth which is placed under their control. Both Mr. MARKHAM and Mr. BINNS are now energetically pushing forward sinking operations, and, by their exertions, in the course of a year or two, in their own district alone, the produce of North Derbyshire will be increased by many thousands of tons per annum. Besides the localities named, there are others where the coal is fast being pierced. At Doe Hill and Shirland there are thousands of acres being opened out. In the former place, which within the last few years has been raised from a hamlet of some dozen houses, there are now close upon 2000, and the same may be said with regard to New Whittington, and other places entirely dependent on the collieries in their neighbourhood. At Killamarsh also there is a very large field about to be opened out on the estate of Earl BATHURST; whilst higher up, in the Southern division, there is the large coal field of the Duke of PORTLAND, which is sure to be made available. On the estates named there are advantages in every way attractive to the capitalist. The coal is reached, in many instances, at a comparatively moderate depth, is free from gas, whilst the cost per acre is considerably less than is charged for the same seams in South Yorkshire. With those important advantages, and with the facilities which may be expected at the hands of the Midland Railway Company, Derbyshire in a very few years will take the very first rank as the feeder of London with coal. The Midland Company will also be benefited by liberal arrangements with the large producers, for when it is able to carry minerals direct into the metropolis it cannot help but monopolise the greater portion of the traffic at present shared in by the Great Northern and London and North-Western Railways. There are other interests also which are connected with the coal trade that will be considerably benefited by the Midland's through route, to which we may again advert.

FURTHER INFORMATION ON THE AMERICAN TARIFF QUESTION.

Than the question of the duties levied in the United States upon the products of this country scarcely any subject of greater importance relative to our foreign trade can engage the attention of manufacturers and other commercial men in Great Britain. Deeply interested as the readers of the Journal are in the Iron products of the kingdom, this question has been given prominence in these columns. The day upon which British Iron shall be admitted into the United States, free from those very heavy duties which have been so long imposed upon it, will be one of great satisfaction to every manufacturer and every operative engaged in that great staple trade of these realms. Every indication of the nearer approach of that day is, therefore, most acceptable.

It is tolerably well known that the United States possesses a man of much ability and experience in financial and commercial matters, relating in particular to that country, and that his services have been used on behalf of the national finances there, arising out of the difficulties which the mistaken legislation of Congress upon such topics has occasioned. Mr. WELLS, the Commissioner of Internal Revenue, has for some time been engaged in investigating the difficulties described, and, as might be expected, he is constantly accumulating facts which go to make the continuance of the system at present adopted increasingly odious. No fewer than 6000 articles imported into America have to pay a customs' duty, and as many as 10,000 articles are subjected to an internal revenue tax; and to so great an extent are these taxes levied at the present hour, that it is estimated, notwithstanding the repeal of various excise duties, altogether diminishing the revenue at the rate of $90,000,000 annually, that the internal revenue this year will be at least $275,000,000, and the revenue from Customs nearly $160,000,000.

Of the internal revenue for 1865, $8,494,989 were raised upon iron and its manufactures—a tax, it will be perceived, not upon foreign iron, paid on its arrival in the ports, but upon American iron at the works, and upon it and British iron in the course of manufacture. Mr. WELLS is altogether opposed to the internal revenue system, and selects iron and its products as an illustration of the injurious effects of undiscriminating taxation upon domestic industry. He says, "It must be obvious, in the first place, that the collection of this amount of revenue from iron and its manufactures is an exceedingly complicated affair. In the place of few points of collection, the collection districts extend over every furnace, rolling-mill, forge, foundry, machine shop, and hardware establishment in the country, entailing an additional proportionate increase of expense of taxation. As comparatively few, moreover, of the manufactures of iron come to

the consumer, except as the result of several processes, and as each process in turn is levied upon by the tax collector, an extensive duplication of taxes, and a great enhancement of prices, necessarily follows, and as the details of this duplication of taxes cannot, in a majority of cases, be known to the consumer, the unscrupulous dealer is free from nearly all restraint in his efforts to enhance and maintain prices. Again, iron being an essential element of almost all forms of machinery, the taxation which enhances its price necessarily multiplies the price of all articles produced through its agency, thus restricting consumption and the extension of domestic and foreign commerce, and unfairly exposing almost every branch of domestic industry to a competition with foreign producers, who are free from similar disabilities. And what is true of iron is almost equally true of nearly every other article of ordinary domestic production."

Mr. WELLS recommends that the relief more undoubtedly needed and sought for by the producing interests of the country shall be mainly given by Congress, through a reduction of taxation on the raw materials, named by him, and on the machinery and results of domestic industry, rather than by an extensive and large increase of the rates of duty on importations. Such legislation, coupled with an early adoption and adherence to some fixed policy, looking through combination to the resumption of specie payments, which, in the opinion of the Commissioner, by decreasing the cost of production, and increasing the purchasing power of wages, go very far towards diminishing the evils which now tend to arrest the development of the trade, industry, and commerce of the country.

There is, however, reason to fear that during the struggle that has yet to take place before the Commissioner's recommendations discountenancing increased duties on importations can be carried out, the united opposition of the different "interests"—and, in respect of iron, "interests" including alike men and masters—will, in the earlier changes that must take place, probably bring about, indirectly, a continuance of the existing tariff on importations. This is to be inferred from the circumstance that on March 2 last internal revenue taxes were repealed to the extent of some 40 millions of dollars annually. The reduction upon the winter of that year in the whole amount of national taxation of this class; yet that in that reduction no leading principle is observed, the relief having been made chiefly in favour of those traders who, by skilful electioneering or "lobbying," could command the greatest share of congressional influence. Nevertheless, so deep and so wide is the agitation upon the question of free trade *versus* protection throughout the United States, and so convinced are the best men throughout that country of the evils which are resulting from a continuance of the prevailing restrictive policy, that every additional piece of information that reaches us from the United States upon this question tends to increase the conviction that although that policy may, in its death throes, display an appearance which to some may represent a continuance of vitality, yet that its utter annihilation throughout that wondrous country cannot be remote.

CHAPAPOTE FROM SOUTH AMERICA.

Some fine specimens of this mineral have just been received from South America by the Sheffield Metal Company, by whom a sample has been submitted to Prof. A. Miller, of King's College, London, for analysis. In appearance, the sample forwarded to the *Mining Journal* office, and which may be there inspected by those interested, is somewhat similar to that obtained from the chapapote deposits of Cuba, though it is, perhaps, less free from impurities, having probably been taken from near the outcrop of the deposit. The owner of the property upon which the chapapote exists writes that there is enough on the estate to last for years, and that an American engineer who was there had tested the mineral for the manufacture of illuminating gas. The gas extracted was used for the illumination of the owner's sugar plantation, and gave great satisfaction. It was found that after having extracted the gas nearly three-fourths of the weight of the mineral remained in the form of a thick oil, capable of application as japan or varnish. The subjoined is Prof. A. Miller's report:—

King's College, London.—I have carefully examined the sample of this substance, so far as the small quantity which you forwarded enabled me to do. It is a black bituminous material, which burns with a brilliant smoky flame, and leaves a quantity of siliceous ash, amounting to a little more than a fifth of its weight. Oil of turpentine and benzole dissolve it pretty freely. Alcohol, ether, and alkaline leys are nearly without action upon it. When distilled it furnishes about a third of its weight of a thick brown oil, and gives off a large proportion of illuminating gas. The distillate has an offensive odour, owing to the presence of a large proportion of sulphur—not less than 4·08 per cent. of the entire mass. Though the pitch is hard and brittle at common temperatures, it softens and becomes sticky below the boiling point of water. The following are the numerical results:—

Specific gravity	1·364
100 parts of this mineral yield—	
Siliceous ash	20·7
Thick brown oil, containing sulphur	32·6
Total sulphur	4·08

The proportion of oil will, no doubt, be different if the distillation be conducted on a large scale. I had not enough of the material to determine the proportion of light naphtha, burning oil, and lubricating oil which the distillate contains. A few pounds of the material would, however, enable these points to be ascertained.—W. ALLEN MILLER.

With regard to the application of chapapote to purposes other than the manufacture of gas, the invention of Mr. J. J. de Arrieta, described in the *Mining Journal* of Sept. 28, 1861, need alone be referred to, although several other patents have also been taken for similar purposes. Mr. Arrietta claimed the employment for various useful purposes of the chapapote, either in its solid or fluid condition, and either alone or combined with other substances. It may be applied to wood, metal, or various other materials, to protect and preserve them from wear, damp, oxidation, corrosion, the action of liquids or gaseous fluids, acids, and insects, and other agents or causes of deterioration; it may also be applied to ornament them, to strengthen them, and to render them impervious to water, gases, and other fluids. Amongst the instances of the forgoing protective, preservative, and useful applications, may be mentioned its use in coating ships and plates in armour-covered vessels and floating batteries, in insulating and protecting telegraphic wires, strengthening rope and cordage, coating sleepers, rails, and railway chairs, and numerous other applications and uses; combined with or applied to paper and certain other materials, a fabric is produced suitable for protecting houses from damp, water, and other atmospheric influences for constructing pipes for fluids and various other purposes. The chapapote may also be applied to the covering of roads and footpaths.

The article or substance to be treated is taken either hot or cold, and the chapapote in pieces, powder, paste, or in a fluid state, as may be most convenient, and either with or without a preliminary coating of oil, paint, varnish, or fatty matter, and either with or without an exterior coating thereof; in some cases applying heat for smoothing, melting, distributing, or shaping it by means of a heated instrument, or the object or substance to be treated may be passed through a trough or vessel containing chapapote, and brought out through an ejection orifice, or a die; or it may be steeped or immersed in chapapote. For ropes, cordage, and fibrous and textile fabrics, they may be coated with or steeped in chapapote either when manufactured, or their fibres or strands may be saturated therewith before weaving, twisting, or working them up into a rope or fabric. Wire-rope may, in like manner, be coated with chapapote in the strands, or before or after twisting, and may have an external hempen or fibrous coating, also treated with chapapote. Mr. Arrieta finds that a preliminary coating of coal tar may be applied with advantage to the surface to be coated before applying chapapote. In addition to its value, when applied to the several purposes above enumerated, he likewise found that a useful material could be manufactured by mixing chapapote, either heated or not, with dry paper pulp, and then applying pressure. A strong fabric may also be manufactured by coating or saturating paper pasteboard, or the like, or textile felted and fibrous fabrics with chapapore, suitable for gas and water-pipes, tanks, and other fluid vessels, ordnance, military accoutrements, soles and linings for foot coverings, roofing (exterior and interior), and foundations of buildings, telegraph insulators, ships and other vessels, and other purposes.

For the purposes of ornamentation, again, it was considered that chapapote might be made to play an important part. It was proposed that colouring or decorative agents should be mixed with the chapapote, the article to be ornamented being steeped therein, and then finished with a smooth instrument, by preference heated. Chapapote may be introduced in the brickwork, masonry, or interior of walls or buildings, and used for facing and cementing brickwork and masonry of fortifications; and metal plates coated therewith or steeped therein may be used for armour-plating ships and floating batteries. For covering or paving roads or other surfaces, slabs may be prepared by mixing chapapote with oily matters, or with earthy, claycy, or other such like matters, or with both, expressing from it the excess of oily or other fluid, and employing it with or without granite or other stony substance, or even metal or wood, which, when used, may be embedded by pressure in the chapapote in powder or fragments, or prepared and pressed chapapote may be used as a foundation or cement for blocks of granite or other paving materials. That a material capable of so many useful applications should have been permitted to remain so long unapplied, after attention had been directed to it, appears almost inexplicable; but it may be hoped that now that the Sheffield Metal Company have taken up the matter, the material will speedily be brought into very general use.

MINING, METALS, AND MINERALS—PATENT MATTERS,

BY MICHAEL HENRY,
Patent Agent and Adviser, M. Soc. Arts, Assoc. Soc. Eng.

The manufacture of hydraulic concrete, or, as it is now called, "beton," a term adopted in and recognised by English technical nomenclature, is identified to a certain extent in France with the name of M. FRANCOIS COIGNET, who is the patentee of several important improvements relating to the subject, and the author of a French treatise published some years ago on Beton Constructions. The importance of this structural material should not be underrated, and it especially requires attention in an insular country like our own, in which the peculiarity of our physical geography exacts the construction of subaqueous public works almost to as great an extent as that of works on dry land. A main feature of M. Coignet's beton consists in the reduction of the materials or ingredients (lime and sand, with or without absorbents) to a pulverulent paste or pasty powder, by using a very small proportion of water, and by mixing or triturating the ingredients by an intimate and sustained operation in a suitable machine, and then ramming or agglomerating the pasty powder-like mass into the required form. Sometimes cement is employed; sometimes, also, pieces of metal are used in the mass as binding agents. The use of pouzzolanas as absorbing media is not always needful in this manufacture, as the reduction of the proportion of water renders the mass almost anhydrous. In the last new patent obtained by me, as a communication from M. Coignet, an apparatus is described of very ingenious construction, as regards which, by the way, M. Coignet gracefully acknowledges that he is indebted to a M. Franchot for assistance. The machine consists mainly of a pair of horizontal shafts, carrying blades shaped like the segments of a screw, the segments at one part being so shaped that their line of curvature if continued would form a complete screw, while the segments at another part would form interrupted screws. The shafts are supported on feet when the apparatus is at work, but the machine can be rendered bodily portable by mounting it on a carriage or truck contrived for the purpose. The casing in which the shafting works is fitted with removable covers, so that the interior may be readily attained and cleansed. Conical outlets, opened, closed, and regulated by conical plugs, are at the ejection end of the shafts. Various applications of beton for constructive or structural purposes are minutely described in this specification. Monolith arches, buttresses, and piers suitable for the erection of bridges and for other uses are explained; a mode of building subaqueous constructions is also set forth, in which a hollow chamber or tubular column of beton is employed. The subject is not without special interest to the inhabitants of London, to whom a cheap, safe, and expeditious mode of building bridges over the metropolitan river is assuredly of considerable moment. When we reflect that our busy city is divided by a broad sheet of water, which actually separates some of the business quarters from others, and between these continuous communication is a business necessity, it seems really extraordinary that bridges so few and so far between span the river and connect the parts of one and the same metropolis. Take, for instance, the central point of London—Temple Bar—and conceive the annoyance a busy man, to whom time is a serious object, must experience in knowing that he must walk some not inconsiderable distance to attain a point of the river exactly opposite him. If the contemplated Metropolitan Government Bill culminate into law, it may be hoped that its first work will be to provide suitable intercommunication between North and South London.

Among recent Applications for Patent occur the following:—R. SMITH, Islington, mixing water, iron, sulphur, arsenic, and oils together, making a perfect coating for ships. (This applicant appears to have published his invention in his title. Can any patent agent have advised him?).—F. HOLMES, Plumstead, pumps.—G. DAVIES, Serle-street, metallic eye for laces: communication from L. C. Hoffmeister, Philadelphia.—Wm. HEYES, Dukinfield, and W. BEVAN, same place, self-acting buckle or coupling for lifting, hoisting, or winding at coal pits.—W. E. NEWTON, Chancery-lane, apparatus for boring rocks, metals, or other substances: communication from H. de la Roche Tolay, Rue St. Sebastian, Paris.—G. R. B. ARNOTT, Gloucester, machinery for making bricks.—J. S. HENDERSON and J. MACINTOSH, Aberdeen, cylindrical metallic cases and apparatus employed therefor.—J. S. BURKE and B. BURLEIGH, Queen's-square, Westminster, construction of subaqueous works and foundations.—J. NELSON, Sunderland, casting hollow and other fire-bars.—J. B. E. GRAND PERRIN, Paris, smoke consuming apparatus.—E. H. BERNIER, Paris, safety apparatus for raising and lowering persons and weights in mines.—J. HARGREAVES, Lancaster, steel and soft iron from cast-iron.—J. KELLETT, Leeds, combustion or prevention of smoke and economising fuel.—C. T. HIGGINBOTHAM, Glasgow, preventing smoke and economising fuel.—A. E. HERMANN, London, compound to be used for igniting fires.—J. LAING, Deptford-yard, Sunderland, fastening wood to iron, for securing the planking composite ships to the iron frame.—J. BERNEY, Norfolk, bending bars and plates of metal, and forming and working metal.—HENRY FLETCHER, Liverpool, artificial fuel.—T. WRIGLEY, Todmorden, pulley and chain gearing for lifting or traction purposes.—F. D. NUTTALL, St. Helens, Lancashire, furnaces for the manufacture of glass.

Oppositions intended to the following Notices to Proceed must be entered on or before Aug. 6:—No. 620, BRECKON and DIXON, conveying, screening, and loading coke and other materials.—No. 621, TONGUE, steam-engines and pumps: communication from Hart F. Pease.—No. 737, BLAGDEN, extracting silver from alloys of zinc with lead: communication from F. Marquez-Millan.—No. 1476, SHIEL, paving for roads and ways.—No. 1498, Young, treating iron ores to remove phosphorus therefrom.—No. 1880, LAKE, metal ties or bands for securing bales of cotton: communication from Richard G. Latting.

PATENT FUEL—UTILISATION OF SMALL COAL.—We understand that Mr. Bassett, C.E., of Cardiff, has commenced manufacturing some patent fuel at the Aberaman Ironworks, near Aberdare, for Powell's Duffryn Coal Company, and where the process (Barker's Patent) may be seen during the next week by all parties interested in the utilisation of our small coal. The results, obtained from the fuel that was made a short time since at Risca, and tested in the Monmouthshire Railway Company's locomotives, were most satisfactory. We are informed that Mr. Bassett intends reading a paper on this subject at the next meeting of the South Wales Institute of Engineers, which will take place at Swansea on Aug. 17. We understand that the fuel made by this process (Barker's Patent) will stand severe atmospheric changes; the cost of the materials employed to bind together the small coal is about 1s. on the ton of fuel.

TIN-PLATES.—The exports of tin-plates appear to have increased this year, having amounted in the five months ending May 31 to 615,052 cwts., as compared with 595,702 cwts. to the corresponding date of 1866, and 497,412 cwts. to the corresponding date of 1865. This increase occurred wholly in May, so far as relates to the comparison between 1866 and 1865. The exports have declined this year to the United States—and very considerably, too—but they have increased to France, British America, and other parts of the world. The total exports of tin-plates last year were 1,419,519 cwts., as compared with 1,254,367 cwts. in 1865, 1,002,947 cwts. in 1864, 1,115,927 cwts. in 1863, and 1,001,437 cwts. in 1862. The value of the tin-plates exported last year was 1,896,341*l.*—in which sum the United States figured for 1,434,521*l.*, as compared with 1,481,098*l.* in 1865, 1,263,246*l.* in 1864, 1,309,673*l.* in 1863, and 1,212,655*l.* in 1862. Ten years previously (1852) the corresponding total stood at 1,057,926*l.*

AUDIT OF PUBLIC COMPANIES' ACCOUNTS.—In another column will be found copies of two letters which have passed between Mr. Burwood Godlee, of Leighside, Lewes, a shareholder of the London Lead Company, and the secretary of the company, upon the subject of auditing the company's accounts, with Mr. Godlee's comments thereon. It appears that the question was brought forward by Mr. Godlee some few years since, but that no action was taken, because the course proposed was represented to be prejudicial to the interests of the majority of the shareholders, Mr. Godlee being, as he contends, powerless, because two-thirds of the capital stock of the company was already owned by the court of assistants and their immediate friends. The directors urge that the court of assistants are, in fact, the auditors, since nearly all payments are made in the North, and some member of the court annually visits and checks all financial matters. The court of assistants, as will be seen from Mr. Godlee's statement, consists of twelve gentlemen, principally bankers, holding the highest possible commercial position in the City of London. Mr. Godlee considers that his motion was lost in 1863 simply through the votes of the directors, and it is much to be feared that so long as the directors' interest is equal to double that of the other shareholders he will be equally unsuccessful. The course, however, which he has now taken is undoubtedly the best he could adopt to obtain the co-operation of those shareholders who entertain the same opinion as himself. Our Durham Correspondent's letter, in another column of this day's Journal, contains some particulars of the lead mines in the North of England, which will be interesting to the shareholders of the London Lead Company.

REPORT FROM SCOTLAND.

JULY 24.—Pig-iron has been dull during the week, and prices have gradually declined. We have heard it repeated more than once that as there are few buyers certain brokers are operating for a fall, so that they may buy cheaper, and then hold for an advance. The decline was most unexpected, and came at a time when it was believed there was a steady undergrowth of revival, which was sure to culminate in higher prices. The holidays have reduced the shipments, which were for the week ending yesterday 8225 tons, against 13,160 tons in the corresponding week of last year. To-day the market was again rather lower, but a large business was done at 52s. 7½d. and 52s. 6d. cash, and 52s. 9d. a month. The close was still sellers, 52s. 6d. cash; buyers, 52s. 4½d. No. 1, g.m.b., 53s. 3d.; No. 3, 53s. 6d.; Gartsherrie, No. 1, 60s. The termination of the holidays has not yet imparted any improvement to our trade in Finished Iron, which continues in a drooping state. The merchants who keep stocks in warehouse very generally balance at this period, and as they usually run them down very low, so as to facilitate stocktaking, a few hundred tons will be required to absorb what they may have on hand—only, as the demand is so sluggish, these orders will be confined to their minimum extent. Plates for shipbuilding are said to have been done here at prices lower than ever quoted, but as we could not find out with anything like reliability the exact amount, we will defer giving the quotation. All kinds of manufactured iron are quiet, and prices very unremunerative. Pipe-founding brisk. Coals meet with a fair demand for general purposes, but prices are weak. The shipments, if anything, show a falling off, being only 26,285 tons, against 27,150 tons in the same week of last year. The lock-out in the Motherwell, Hamilton, and Larkhall districts has been partially broken down by some of the masters opening their works at the 4s. a-day rate; but it still continues in the Wishaw district. Mr. McDonald has issued a circular to "the miners of Scotland," soliciting aid for the locked-out men. It is penned in the usual style. "The effort is one," says Mr. McDonald, "to crush wages, and reduce the men to slaves." . . "Send your moneys to me," &c. Of course, it will be apparent to all what the Secretary's aim is. However, the action of those men who have returned to their work is to be commended, as only a day or two ago they vauntingly declared that they would not return till they obtained a rise of 6d per day.

During the past fortnight we have had several launches from the Clyde shipyards, which have left them bare and deserted like. We are glad to notice this morning, however, that the Messrs. Napier have got the keel and a few of the ribs of a pretty large vessel laid down on the east berth of their yard at Govan. The Messrs. Inglis have launched a handsome twin screw-steamer, named the Jaguarete, for Messrs. Isaac and Samuel, London, to be employed in their South American trade; a small screw has also been launched for plying on the La Plata, between large streams and the shore.

The Easdale Slate Quarries, formerly worked by Lord Breadalbane, have been let to a company, who will work them in the future. The going colliery of Stevenston, parish of Bothwell, with the minerals, are to be let; also, the unlet minerals in the lands of Avonhead (40 acres), lying five miles east of Airdrie. They include shale and various descriptions of coal.

REPORT FROM NORTHUMBERLAND AND DURHAM.

JULY 25.—The general state of the Coal Trade here does not improve, but, on the whole, continues flat, and large heaps are accumulating at the collieries; in fact, all branches of trade are extremely dull, with little prospect of any improvement. However, notwithstanding the general depression the trade of the Tyne continues brisk, indeed improves rapidly, and this is most apparent at the Tyne Docks, where imports and exports are greatly increasing. This project of the North-Eastern Company has not only proved a most decided success, but a valuable feeder to their important railway system, as well as a great acquisition to the trade of the Tyne. The docks are admirably situated, both for export and import; all the appliances and arrangements connected with them are also most excellent, and as the Tyne is now a first-class river in every respect, where ships of almost any tonnage can enter or depart at all times, the rapid and continued advance of the Tyne Dock needs excite no suspicion. This increase of trade may be partly ascribed to the introduction of Esparto grass from Spain, but it is due also to the introduction of the timber and the coal export trade on a large scale; though it is not very cheering or complimentary, still, without doubt, part of this trade has been abstracted from other ports on the north-east coast. A number of offices and other public buildings are about to be erected at the Tyne Dock for the accommodation of the increased trade, and a town is also rapidly rising up on the spot, which must soon become of considerable importance.

There are some items of interest in connection with the chemical trade of the Tyne. The new chemical works of Kennier and Co., at Jarrow, are now in full operation, and works of a similar kind are also to be commenced by Mr. Nixon—a rising, and most enterprising, native of Jarrow. In connection with this subject, it may be mentioned that a patent has been granted to Mr. C. Allhusen, the eminent chemical manufacturer on the Tyne, for an improved method of treating small pyrites and pyrites dust, so as to obtain sulphur therefrom. It appears that hitherto there has been some difficulty in treating these pyrites, so as to extract the sulphur in a profitable manner, although it was perfectly well known from analysis that those pyrites contained a large amount of sulphur. The process of Mr. Allhusen, however, just patented, will remove this difficulty, and prove of much importance to miners, &c. The pyrites alluded to, we believe, also very frequently contain copper in considerable quantity, as well as sulphur.

It is hardly surprising that among the large number of men brought from the Cornwall district some should prove of unsteady and thriftless habits; many of them, when brought and engaged for service at works for a certain term, speedily throw up their engagement, and travel about in a style approaching to vagrancy. On Saturday some cases of this kind were brought before the Durham county magistrates. It appears that a short time ago the agents of the Earl of Durham procured a number of men from Cornwall to work at Sherburn Colliery, but since their arrival in the North a large number have absconded, in many instances leaving their families behind them. In one case two men were charged with leaving their employment, and were apprehended at Castle Colliery, near Shotley Bridge. Both men pleaded guilty, and were sentenced to three months imprisonment. And on Monday five other Cornish miners, who had been apprehended at Lintz Colliery, pleaded guilty to leaving their employment at Sherburn Hill Colliery. One of them was committed to jail for one month, two others for 14 days, while the remainder were discharged on promising to return to their work.

The Inspectors of Salmon Fisheries have recently visited the Lead Mines of Weardale and Teesdale, with a view of devising some method of getting rid of the "hush" from the lead mines, which so seriously affects the fish breeding and angling capabilities of the rivers in the North of England:—

The CORNISH MINE, on Bollyhope Pasture, is leased by the London Lead Company from the Dean and Chapter of Durham. The inspectors and party were met on their arrival by Mr. R. W. Bainbridge, the manager for the company, and his son, Mr. Henry Bainbridge, who led the way to the ore-crushing mills, after which they took their visitors over the different parts of the establishment. The whole of the work in this mine is done by machinery, attended to by boys, who are under the superintendence of one man. The part of the establishment which the inspectors had come to see was the tanks provided for the water after it leaves the metal, which is technically known as the "hush." For the reception of this water three large tanks are provided, each being fitted with a number of longitudinal beams, which divide them into compartments, and forward the process of filtering the impurities of the lead from the water. Besides these tanks, through which the water passes in succession, there are two large pits, which were provided about four years ago at the suggestion of a commission on fisheries which was then sitting at Darlington.

The BURTREE PASTURE MINE is one of the oldest and richest in the North of England. It is the property of Mr. Beaumont, whose agent, Mr.

Thomas Sopwith, formed one of the party, and showed the inspectors over the establishment. The operation of washing the lead is the same as that pursued at the Cornish Mine, with the sole difference that whereas at the former the whole process is performed by machinery, here it is done by hand labour, boys preponderating over the men in the work. Mr. T. Sopwith stated that Mr. Beaumont wished to do all in his power to meet the views of the inspectors, and that three immense tanks were already in course of construction for the better purification of the "hush." He also pointed out that the men and boys on the establishment were perfectly healthy in every respect, and appeared as stalwart as the other inhabitants of the dale.

The WIREGILL rich lead mines, which discharge their "hush" into a brook that meets the Tees a little below Middleton, are leased by the London Lead Company, whose manager, Mr. R. W. Bainbridge, with his sons, Messrs. Henry and Charles Bainbridge, had made arrangements to accompany the inspectors and party over the principal mines of the company in Teesdale. The party having been joined by Mr. Wm. Lee, overman of the underground department of the Wiregill Mine, Mr. Jacob Redshaw, washing agent of the company, and Mr. Joseph Pattinson, mining agent in the underground department, proceeded to inspect the crushing-mill, and afterwards the machinery performing the operations of "plunging," "hodging," and washing. An adjournment was then made to the "settling pits," which extract the lead from the water after it has done its work in the other departments of the above-ground operations of the mine. At this mine, which is one of the richest in the possession of the company, there are three sets of settling pits, through which the water, or "hush," passes in succession, and as a proof that they do their work efficiently, Mr. Bainbridge informed the inspectors that from experiments made it was found that the "hush" in the first series of pits possessed 5 per cent. of lead, in the second only 2 per cent., and in the last this was reduced to a small proportion of ¼ per cent.

The COLDBERRY MINES are situated on a shoulder of the Pikelaw ridge, and derive their water supply, an indispensable adjunct to lead mining, from reservoirs formed near the top of the fell. The operations are carried on both by hand labour and by machinery, at several parts of the hill, the water descending from the reservoirs visiting the various places where the "plunging," "hodging," and washing processes were being performed, and passing through various sets of "settling pits," until it was finally discharged into an immense reservoir close to the burn, into which the "hush" is turned at stated periods by means of a dam, after being allowed ample time to settle. The proportion of lead found in this tank has about the same proportion—¼ per cent.—as at the Wiregill Colliery pits. At both of these places the inspectors recommended the erection of another series of "settling pits," as likely to further purify the "hush" before it was finally discharged into the neighbouring burns. The party afterwards ascended to the mouth of the mine, inspecting the various modes of separating the mineral on their route. At the entrance to the mine is the crushing machine, through which the blocks of ore are passed before the washing operation is gone through. The process is performed by a machine which was first invented in America, for the purpose of crushing stones for road making, and known as Blake's machine. A similar apparatus is in operation at the Wiregill Mines. The work above ground at both of these places is done by lads, who, with the miners, reside at Middleton, and have, consequently, in some instances, four or five miles to walk over mountain roads to their work.

The NEWBIGGEN MINE is the property of Messrs. Wilson and Crawhall. The work is performed by hand labour, and is not so extensive as the operations at Coldberry, on the opposite face of the ridge. The ore is obtained from the lode by means of a burn, which, descending as it does from a higher altitude, is dammed up until a sufficient weight of water is obtained, and is then turned loose down the sides of the hill, when it lays bare the ore beneath the surface. The separating process is performed by "cradling," after leaving which the "hush" is transferred into a series of "settling pits," from which it passes to the Tees at the foot of the fall near the village of Newbiggen. Before leaving this point, Mr. Josh. Dodds handed round a letter he had received from the secretary of the Severn Board of Conservators, which enclosed plans showing a superior mode of filtering, to be obtained by means of catch-pits provided with gravel and charcoal.

The PIKELAW MINE, which is also known in the neighbourhood as Collinson's Harsh, from its owner, is situated in a ravine (formed by "washing") near the top of Pikelaw. This was the last place to be visited after leaving the Newbiggen. The work is done by hand labour, and consists of laying the vein bare by flushing with water, and then gathering the ore by hand picking, and afterwards submitting it to the process of washing, as in other places; the "hush," after leaving the "settling pits," running down the side of the fell to the Tees, as in the case of its neighbour at Newbiggen.

No particular recommendations were publicly made at either of these mines, beyond the exercise of the utmost care in providing "settling pits," and keeping them in a thoroughly efficient state.

The Inspectors afterwards dined together, when Mr. Walpole said they had been met in the best spirit by the agents of the London Lead Company; and with regard to the task they had before them—the purification of the river—he was of opinion that much might yet be done by filtration, and recommended that the water from the mines should be forced upwards through the filtering-beds, and thus the whole of the deleterious substances would be left behind. Mr. Bainbridge had assured him that everything possible should be done by the Lead Company, and there was no doubt that both as a fishing river, and as a stream affording a supply of drinking water to a large community, the Tees might be placed in the first rank. Mr. Henry Pease, alluding to the Lead Company, said it was an association which had conferred immense benefit upon the population of that district, and had striven energetically and successfully to promote the physical and moral welfare of its workpeople. Col. Scurfield proposed the health of Mr. Bainbridge, and thanked him in the name of the assembled party for the very friendly reception he had given them, and the anxiety he had shown that they should become perfectly acquainted with the scientific processes of which he was the manager. Mr. Bainbridge, in an able speech, expressed the gratification he felt in meeting them. He referred to the improvements which the Lead Company had carried out in the Dale, and said they might rest assured that all that could be done by the company should be performed in preserving the purity of the streams. They had spared no effort in introducing modern appliances, and they were still ready to adopt every beneficial suggestion that might be submitted to them.

The Inspectors, who were accompanied by Mr. William Henderson, Mr. Ground, and Mr. Caldcleugh (secretary to the association), drove to Coxhoe and Kelloe, visiting the coal mines from which the poisonous water is pumped, by which the Croxdale Beck and the river is so dreadfully polluted. They expressed great surprise that no attempt had been made to neutralise the poisonous qualities of this water, in which they declared it impossible that either animal or vegetable life could exist.

REPORT FROM NORTH AND SOUTH STAFFORDSHIRE.

JULY 25.—There is nothing fresh to say about the state of the Iron Trade. As tolerably good orders were given out at quarter-day, fewer are coming in now, but the works are in fair operation.

At the Staffordshire Assizes to-day an engineman, named Josiah Bennitt, was convicted of manslaughter for neglect of duty, which caused the death of a man named John Underwood. This is the first conviction for manslaughter for such neglect for a long period. The facts are simply these: a man and a boy were being lowered at the Low Moor Colliery, Brierley Hill, on Sunday, April 7, and whilst they were descending the shaft to attend to the horses, the skip was stopped to enable them to light a candle, which they could not do at the top, owing to the strength of the wind. They gave the signal to be lowered further, when, from some cause or other, the action of the engine was reversed, and they were pulled over the pulley. Underwood fell down the shaft, and was killed, and the boy falling on the side, was lamed for life. The prisoner said that, owing to a screw being loose, the action of the engine was sometimes reversed. It appeared that something had been said about a screw being loose in the piston, but Mr. Baker, the Government Inspector, who had carefully examined the engine, found nothing defective in its working. However that might be, the prisoner was, contrary to the special rules, away from the hand-gear whilst the deceased and the boy were suspended in the shaft; and it was clearly proved that had he been there he could have reversed the engine, and saved the life of the deceased. Under these circumstances the jury found him guilty, but recommended him to mercy, in which the prosecutor joined; but the judge sentenced him to four months' imprisonment, treating that as a light sentence. One is sorry for the prisoner, but the conviction will, probably, save many lives. It will bring home the importance of observing the rules to the minds of the enginemen with an emphasis it has never before had.

Two men were killed on Tuesday, at Spring Vale, near Bilston, by a scaffold giving way in a pit shaft in the colliery of Mr. H. Hill, of Wolverhampton. The shaft had been for some time out of work, and was being repaired by three sinkers. They had removed their shifting scaffold, and were about to lower the fixed one, when one of the supports, of which there were two, fixed into either side of the shaft, very suddenly gave way. One of the men, named Williams, on discovering the scaffold to be moving, took hold of the bowk, which was near to him, and held on to it until he could be drawn up, but, unhappily, both the other men were dashed to the bottom. Williams was drawn up as quickly as possible, when he made known the accident. A number of men were immediately brought to the spot, and they set to work to get the bodies up. Considerable delay was occasioned in consequence of a new scaffolding having to be put in, and repairs done to the shaft, before it was safe for anyone to go down. A long delay was caused by the necessity of using a "blow-George," to expel the carbonic acid gas before it was safe to descend the shaft.

An important case was tried at the Worcester Assizes, before Mr. Justice Shee and a special jury, which lasted from Saturday to Tuesday. The plaintiff, Mr. Beesley, had a steelworks at Oldbury, and he sought to recover damages from the Staffordshire Copper Extracting Company (Limited) for injuries caused by noxious vapours from defendants' works. Defendants built their works opposite to those of the plaintiff in 1865, and the latter complained not only of the intolerable personal nuisance from the fumes, from which the whole of the neighbourhood suffered, but also that everything about his works was rusted. His health, and that of his workmen, suffered severely, and at last he was obliged to give up his works. Afterwards those of the defendants were stopped by the Court of Chancery. Dr. Hill Fletcher, of Birmingham, deposed that the defendant had suffered most seriously from the effects of the fumes. All his teeth had come out with the exception of two, one of which was loose; a great deal of his hair had come off, and his general health was otherwise impaired. Dr. Miller, Professor of Chemistry at King's College, who examined the works in March, 1866, gave it as his opinion that they could not have caused the injuries to the plaintiff's health. The jury gave the plaintiff 200*l.* damages. A verdict of 40s. and costs was taken in another case against them, whilst two others were made remanets.

A man was killed at the Lawton and Harecastle Colliery, in North Staffordshire, on Wednesday. He had been at work fixing a powerful engine in the colliery; and, as he was ascending the dip, coming from the engine, the wagon slipped down the incline and crushed him to death. Mr. Wynne, the Government Inspector, at the inquest gave it as his opinion that the drum round which the chain revolved was too high to be safe, owing to the strain upon it. It was constructed to release itself, but in this instance it did so too soon, and thus caused the death of the deceased. The jury accompanied a verdict of "Accidental Death" with a suggestion that a better fastening should be procured, if possible.

REPORT FROM DERBYSHIRE AND YORKSHIRE.

JULY 25.—Business is moderately good at several of the large iron-works in the southern part of Derbyshire, but is not what can be called active, as at some of the principal establishments considerable additions are being made to stocks. Pipes, sheets, and hoops are being manufactured to about an average extent, but rails continue quiet. The Butterley Company have two of their blast-furnaces out, and little more than one-half of their puddling-furnaces are kept going. At Denby there are three furnaces in blast. The Oakerthorpe Works, near to the Wingfield Station of the Midland Railway, are entirely closed, but the collieries belonging to the company are worked. There is very little doing at the lead mines, and with one or two exceptions the quantity of ore raised is comparatively small, the only one appearing to do much being the Millclose, belonging to Mr. Wass, of Leigh Hall, and which is said to be rather rich in lead. Between a gentleman named Potter and Mr. Arkwright, the lord of the manor, legal proceedings are now pending as to certain mineral rights, and the matter is looked forward to with the greatest interest in the district. The peculiar tenure under which mines are worked, and the privileges given to miners and others in Derbyshire, are of a somewhat extraordinary character, and are worthy of separate and distinct notice. But more hereafter, of the singular customs and rights appertaining to the lead mines of which Wirksworth is the centre and headquarters, with its "barmoot" hall, its steward, barmasters, and jurymen. There is a very fair amount of business being done in Coal, the metropolis and the southern counties being the largest consumers. For gas coal there is also rather more doing, and, as the season advances, some of the large firms will, doubtless, again be in the position they were prior to the dispute of last year, seeing that the district supplies the gasworks of Birmingham, Gloucester, Worcester, and others. Several of the collieries have been obliged to stack, but with the advent of autumn matters will have materially changed for the better. Coke continues in good request, and is promptly taken off the works as soon as made. The Lockoford Colliery, belonging to the late George Stephenson, after being idle for a considerable time, is now being opened out again by a limited company, whilst his well-known seat, Tapton Hall, with the minerals under it, is now advertised for sale.

There is no alteration in the dispute in the southern part of the county between the coalmasters and their men; but no long time, it is expected, will elapse before a considerable number of those out will express a wish to resume work; seeing, as they do, that the colliery proprietors are determined to pursue the policy they first indicated, of not employing any person connected with a Union.

In the South Yorkshire district business matters remain in much the same state as noticed last week, the only branches of the Sheffield trade which may be said to be at all good being the manufacture of steel railway material. Most of the iron-making establishments are fairly employed, and a good deal of manufactured iron is being turned out. Hoops and sheets are in best request, but during the week one or two of the rail mills have been set in operation. Bessemer rails for America, India, and home lines continue in active demand, makers having orders in hand which will last for a considerable time to come. A rather better trade is being done in Coal, and a fair tonnage for the season is being done to London and the South in Silkstones and the best qualities of the Barnsley seam. In steam coal, the business doing in which has for a considerable time been very quiet, there are indications of improvement, and several of the collieries are working more time than they have been doing. To Lancashire, owing, in a great measure, to the strike of the colliers in the Oldham district, owners on the Manchester, Sheffield, and Lincolnshire Railway are sending more coal than usual. But as some of the collieries in the neighbourhood of the strike are pushing their produce, the reduction of 9d. per ton made some time since by the South Yorkshire owners, notwithstanding the increased demand, has, owing to the competition, to be continued. Engine fuel and slack for the wagon works and machine shops at Gorton and the Manchester district are in fair request, and so also is coke, for the manufacture of which there is a moderate demand for slack.

Several new collieries are being opened out, the one at Monk Bretton, belonging to Messrs. Day, Embleton, and Co., being progressing satisfactorily. When completed it will be one of the finest in the district, and will be most advantageously situated for the export of its produce. The neighbourhood of Carlton will also be considerably benefited by the one to be opened by Messrs. Craik and Co., in the extensive field belonging to Lord Wharncliffe. The opening of the No. 1 shaft of the Oaks Colliery is now proceeding satisfactorily, and during the last few days a very large quantity of stuff has been got out. Up to to-day there has been about some 90 yards got out, leaving about the same to be removed before the bottom is reached. In the event of there being little interruption to the work of clearing, it is not unlikely that the shaft will be cleared in about three or four weeks at most from the present time. Various rumours and reports have been given in several papers as to the future mode of procedure, but it is sufficient to state that there is not the slightest foundation for them—indeed, no more than there is for the recent discovery by a writer in the *Leeds Mercury*, who announced last week that "sulphur" had been found in the Pinder Oaks Colliery which was "not fiery!" What next, indeed?

REPORT FROM MONMOUTH AND SOUTH WALES.

JULY 25.—There is a probability of the anticipations of ironmasters respecting the prospects of the Iron Trade being realised, as the more cheerful tone assumed during the past week is maintained, and it is evident that makers are beginning to have confidence in the future, and look forward to a tangible increase in the demand before long. Had railway securities maintained the position which they occupied a month or six weeks ago, there is little doubt that ere this several important home contracts would have been given out for rails; but as soon as the finances of the leading companies are on anything like a satisfactory foundation, the deferred orders will soon make their appearance. Some description of bars are selling better, the purchases of certain trades having increased. Stocks of puddled bars at several of the leading establishments are still heavy. In pigs quotations evince increased firmness, more especially for the best cold-blast makes. Enquiries from the United States and several of the foreign markets are on the increase, and the British American provinces are looked forward to as tolerably good customers. A contract for 10,000 tons of rails is in the market for Holland, and as the Dutch Government are good paymasters, there will probably be keen competition for the order. Business has decidedly improved in the Tin-Plate Trade, and even buyers admit that there is a much better demand than was the case a few weeks ago. As stated in last report, cokes are selling freely at the full current rates, and there are no stocks in the hands of makers. There is a good enquiry for charcoals. It cannot be said that any improvement has taken place in the Steam Coal Trade during the past week, and merchants still complain of the slow manner in which orders come in from continental houses. There is just cause of complaint at the present time, as the exports are not equal to the corresponding period of last year, and the busiest part of the season may now be said to be at its height. In the House Coal Trade there is tolerable amount of business doing coastwise, West of England and Irish houses purchasing a fair average.

The trustees of the Marquis of Bute have just completed the erection of a new hydraulic tip at the East Dock basin, Cardiff, which greatly facilitates the dispatching of vessels from that port.

The Porthcawl Docks, which were commenced two years ago, were formally opened on Monday, and the occasion was one of a general rejoicing throughout the district, as the opening of the dock will not only give an impetus to the coal trade up the Llynvi and Ogmore Valleys, but be the means of causing other collieries and works to be started in the valleys named.

At the Glamorganshire Summer Assizes, on Wednesday, the cause "Thomas *v.* the Gilfach Coal Company," was tried before Baron Channell, and was an action of ejectment. The plaintiff is a farmer, and in 1863 he leased for 21 years a right of way over part of his ground, and no rent had ever been paid him up to December last. Mr. Francis Williams, for the defendants, said the fact was the company was being wound-up, and plaintiff must, therefore, be nonsuited. Baron Channell said there could not be a nonsuit, but it must be a verdict for the plaintiff; and under his lordship's direction the jury returned a verdict accordingly. His lordship ordered execution in ten days.

Messrs. Sydney Hall and William Henry Parsons, of Swansea, have taken out a patent for improvements in apparatus for moulding artificial fuel.

The death of Mr. Edward Kenway, for many years the secretary of the Taff Vale Railway, is announced. Mr. Kenway was a gentleman who laboured assiduously in the discharge of his official duties, and in connection with them he earned for himself the respect and esteem of the trading community with whom he came in contact.

Notice has been given to all hands at Blaina Works, but it is understood this is preparatory to a transfer of the establishment to new proprietors.

The arrivals at Swansea include—the Europa, from Bilboa, with 200 tons of iron ore, for W. H. Tucker; the Jamaica, from Quebec, with a cargo of timber, for D. Davies and Co.; the Myrtle, from Tilt Cove, with 200 tons of copper ore, for H. Bath and Son; the Donna Maria, from Almeira, with Esparto grass and 135 tons of copper to order; the Caroline Brown, from Tilt Cove, with 150 tons of copper ore, H. Bath and Son; the Jessie, from St. George, N.B., with 14,131 pieces of timber, for W. H. Essery; the Minerva, from Bilboa, with 200 tons of iron ore, for Cory, Yeo, and Co.; and the R. B., from Seville, with 197 tons of manganese, in bulk, for W. H. Tucker.

FOREST OF DEAN.—This district is thrown into considerable excitement consequent upon the approaching election, and which has been fixed for Monday next. The political feeling of the Forest of Dean is decidedly liberal, notwithstanding there are many warm supporters of the present Government, the representative of which who seeks to be returned to Parliament for the western division is Col. Somerset, whose father, upwards of 30 years ago, represented the division. Nearly all the iron and coal masters will support the Hon. C. P. F. Berkeley, the liberal candidate, including Mr. Henry Crawshay, Messrs. James and Greenham, Mr. Osman Barrett, Captain Heyworth, and the Messrs. Goold and others. A very enthusiastic meeting was held at Cinderford on Tuesday evening, Mr. Edwin Crawshay presiding. There were at least 1500 Foresters assembled, and the meeting was addressed by the Chairman, Col. Kingscote, M.P., the present member, Mr. Berkeley, Col. Berkeley, Captain Heyworth, and Capt. Goold. The speakers were vociferously cheered throughout their addresses. The greater portion of those assembled are colliery and mine owners, and who hold small freeholds. The liberal party expect, and, no doubt, will obtain, a large number of votes from the district. The Berkeley family has certainly great claims upon the county, not only because on so many occasions members of the family have represented the electors of the western division in Parliament, but because of the majority of liberal principles throughout the county, and the Forest of Dean especially, thousands of whom would vote for a liberal member if they had it in their power; and further that, inasmuch as progression appears to be the order of the day in this rapidly-rising district, it should be represented by those who would aid its onward march in the great battle of life, instead of retarding its progress. Undoubtedly ere long matters will arise in connection with this district that will require the attention of its representatives in the House of Commons, and it is most important that whoever is returned should assist in laying any such before the Crown.

Coming to the more practical and business part of our notice of the trade just now, it may again be stated that nearly every department finds plenty to do. The only instance this week of scarcity of trade is in the manufactured iron works at Bilson, at which works Mr. Russell's men are under a notice of a reduction of 5 per cent. A short time ago there was also a reduction of 10 per cent., making within the last few months 15 per cent. It is principally wire that is manufactured at these works. At the other furnaces there is no slackness whatever visible.

The Coal Trade has slightly improved since last week, the prices remaining the same as since May last.

In the various building and other trades there is much activity manifested. The Forest of Dean was never in a more healthy or prosperous state than it is at the present time.

The shipping trade at Bullo and Lydney is better than during the corresponding month of last year. The freightages on the railways continue to be exceedingly satisfactory.

THE PARIS EXHIBITION—No. XIII.

[FROM OUR OWN CORRESPONDENT.]

Although no believer in the artificial production of perpetual motion, it is, I think, beyond question that an opportunity sometimes presents itself of advantageously employing waste power in the production of motion; and assuming this to be the case, an account of the MAHOVOS will be generally interesting to the readers of the Journal, since in many instances it might be most economically employed in connection with the working of collieries and mines; it is the invention of Capt. CHARLES VON SCHUBERSZKY, of the Imperial Russian Engineers, and certainly seems to work most satisfactorily. The inventor starts upon the assumption that the railway is beyond question the best means of communication, but that there is still room for improvement. The means of overcoming the difficulties of constructing a railway upon ground of varying elevation have hitherto been very expensive, and railway construction bears some resemblance to the earlier efforts in connection with the conveyance of water.

In former times, when the laws of hydrodynamics were but imperfectly known, the conveyance of water was effected by energetically struggling with every natural obstacle met with—the great effort made always being to remove the obstacle bodily, instead of attempting to devise a means of removing the inconvenience of it by such artificial arrangements as science and ingenuity can suggest. The ruins of the buildings of ancient Rome may be referred to in testimony of the colossal works undertaken to accomplish what would now be done quite as efficiently with one-fiftieth part of the labour, and at a corresponding reduction of cost. Instead of enormous aqueducts, with all their attendant contrivances, in the shape of costly cuttings and embankments, expensive bridges and viaducts, and continual deviations from the route attempted, science has now shown us a simple way of attaining our object—we have learned that, so long as the reservoir is at a sufficient elevation, water can be conveyed through closed tubes quite as effectually, no matter how many gradients may occur, as by any of the more complicated arrangements for levelling the water conduit between the reservoir and the place to be supplied—it is intended that the mahovos shall prove as great a source of economy in connection with railway construction as the use of tubes has in the conveyance of water.

With regard to the application of the mahovos to railways hereafter to be constructed, some economy would probably attend its use. It is very properly suggested that it might appear at first sight that in working with the mahovos there might be difficulty in case of need of quickly bringing the train to a standstill, since the fly-wheel would maintain a considerable *vis viva*, but the difficulty is at once overcome by throwing the wheel out of gear. In the first place it may be well to describe the mahovos in detail, but in the meantime it should be remarked, that although the general principle is never departed from the machine is capable of various modifications in detail. First, I will take the mahovos with four driving axles. The weight of the mahovos, as well as its power, can be materially increased by the use of four driving axles, although three give a very good result. The principal bearing, which in this arrangement exercises no disadvantageous influence, connects the four driving axles in a stiff frame, and the two ends of the frame are so connected that the sharpest curves may be passed round with the greatest facility. The two ends of the frame are so connected by springs and buffers that they may have from 50 to 75 millimetres play in a horizontal direction, and through this play the fly-wheel can move slightly vertically, and thus withstand any shock to which it may be subjected without injury. From the weight of the apparatus, which is equal to about 53 tons, the application of 13¼ tons pressure upon the axle gives 36 tons on the fly-wheel, and 17 tons on the upper part. It is found in practice that the four-axled mahovos requires a lighter fly-wheel than that with three axles, and that the six-wheeled machine permits of a still further reduction. When run at its greatest speed, it has about one-half more power than the six-wheeled mahovos, and that the trac-

ve power of the eight-wheeled mahovos is about one-third greater han that of the six-wheeled one. When it is desired not to increase e pressure upon each axle, the eight-wheeled mahovos offers the reatest advantages as to useful power that can be obtained. The dhering weight, as well as the tractive power, may, however, be ma- erially augmented by the utilisation of the weight of the tender, hich is easily done by coupling one pair of the mahovos wheels ith the pair that carries the tender. The invention is not easy to escribe without drawings, although it is by no means complicated any of its parts, and the model, which is between the avenue from he Ecole Militaire and the Post Office, and nearer the building than he horticultural garden, really works admirably.

The mahovos has been practically and carefully tested on the St. etersburg and Warsaw Railway, and the results obtained gave the fullest satisfaction, it having been found that the saving was as 1·07 ancs to 2·80 francs, for a given quantity of work, or 38 per cent. pon the cost of traction alone; whilst it must, also, be considered favour of the mahovos, that there is much greater security in the orking, and that the line is kept in much better condition. With gard to the working of colliery lines by the mahovos without a comotive, the inventor remarks that there are a great number of nes which are constructed exclusively for colliery purposes, being mployed only for the conveyance of the coal from the pit's mouth the nearest railway or to a navigable river. The average fall of ch railways is often very considerable, and especially in the direc- on of the pit, and here and there a method has been employed for tilising the weight of the loaded wagons in returning the empty nes to the pit's mouth, but the mahovos will permit of all the ad- antages of self-acting inclines wherever an average fall of 1 per ent. is obtainable, so that the invention will be of general utility to lliery owners as soon as its merits become known.

The French are at all times particularly happy in finding high- unding titles for any enterprise in which they may embark, but it not always so easy for them to find a sound practical basis upon hich the superstructure may be raised, or, at least, the promoters o not always make themselves perfectly clear to those who read eir prospectuses; they approach very closely in perspicuity to the tounding announcement once made in the "Petites Affiches de Lon- res," by an energetic Parisian tradesman—Mr. RAGUENEAU, of Rue oquelet, I think—who declared in English (?) that he was selling a achine "to reproduce one's self everywhere, even in travelling, in- finitely on both sides, and on all kinds of paper," whilst his real ject was to explain that he sold an improved apparatus for copy- g letters. The utility of the LIGUE INTERNATIONALE DE LA PAIX, xcept to those who are to receive the subscriptions, is as difficult to scover as was the meaning of Mr. RAGUENEAU'S announcement. he idea of aspiring to the title of "founder" of a league, the chief aim of which is that it shall permit of promiscuous connection, e considered worth 100 francs, even to those who have no aversion the admission of *femelles* to the places usually occupied by men xclusively. Even the 5 franc subscription for the title of Sociétaire ight fail to produce a large income, and this the promoters seem lso to anticipate, for they provide for the admission of adherents, ho incur no responsibility, and from whom voluntary contribu- ons, even the smallest, will be received with equal thankfulness. eace is all well so long as war is unnecessary, and any Anglo-French ociety would, undoubtedly, be well received in both countries, the wo nations having the best possible feelings towards each other, but ll that is German is so specially detested on both sides of the Chan- el, that any closer connection would be very generally objected to.

FREY'S LABOUR-SAVING MACHINERY.—The machinery of FREY ils, of Impasse Rébeval, exhibited in the Agricultural Annex, is equal o any to be found in the Champ de Mars, and, to judge from the umerous medals which have been awarded to the exhibitor, there an be no question that the excellence of his manufacture is very ge- erally appreciated in France. The general style and finish of the achines is all that need be desired, whilst the prices charged are uite as low as is consistent with good workmanship. His travelling- anes, locomobile saw-mills, planing, tenoning, mortising, and mould- g machines are admirable, and a visit to his works at Belleville, hich can be reached by omnibus for a few pence, will well repay he trouble to anyone who desires to see the interior of a well-ar- anged French workshop. In most of the French machines consi- erably less material appears to be used than in corresponding ma- hines of English manufacture, yet they seem to be quite as substan- ial, or, perhaps, it should be said as stiff, as ours, whilst the French achines, of course, appear much more stylish.

MANUFACTURE OF WHITE LEAD.

Considerable interest was excited a few years since in consequence of the introduction by Mr. Thomas Cobley and Mr. John Arthur Phillips of ingenious processes for obtaining white lead direct from the ore, and Messrs. BELL and FELL, of New York, have now patented a pro- cess, the object of which would seem to be to carry out the same idea in a cheaper and more expeditious manner. They claim that the na- ture of their improvements consists—firstly, in the production of the sulphate of lead from the ores of lead, also from metallic lead and from the oxide of this metal, by a novel and expeditious method; secondly, in the treatment of the sulphate so produced in order to obtain a superior white lead; thirdly, in the production of a new precipitate of lead, by using sulphuric acid with muriatic acid to form a double precipitant; and fourthly, in the novel treatment of this substance by alkalies to improve its quality. In the production of the sulphate from the ores of lead the said ores must be as free as possible from sililca, iron, copper, or other foreign matters. The said ores are well ground, then submitted to a thorough oxydation by the usual process of roasting, which is best performed in a rever- beratory furnace. This preliminary preparation converts the common sulphide or the carbonate under treatment into oxide. When preparing oxide from me- tallic lead it is preferable to adopt the ordinary method of making litharge, the object being to produce a complete oxide. In the conversion of the resulting oxides of lead (whether the same are produced from ores or metallic lead) into sulphate, the said oxides are first ground to a fine powder, which powder is inti- mately mixed in a suitable vessel, with about two and a half per cent. of nitric acid, and sufficient water to form a thin pasty mass. This percentage of nitric acid is about the best proportion, although almost any quantity, from 1 to 50 per cent., may be used.

In the next stage of the process the nitric acid merely acts in the capacity of an agent or auxiliary, which is almost immediately liberated, nearly the entire quantity thereof being finally recovered for further use in its original condition. Sulphuric acid is then introduced, with more or less water, sufficient to keep the mass in a thin paste. This combination when attacking the nitrates produced by the nitric acid, generates heat, and a quantity of sulphate of lead is instantly formed. The nitric acid set free again attacks a fresh portion of oxide, converting it also into a nitrate of lead, which is no sooner formed than it is again separated by the stronger sulphuric acid, and a further supply of sulphate is produced. This action and reaction is continued until the whole mass is converted, which generally takes place in the course of a few hours. Instead of using nitric, acetic acid may be substituted. The nitric acid is recovered by allowing the sulphate to settle down on the bottom of the vessel, when the said acid can be drawn off for further use. It may also be recovered after the formation of the sulphate by gentle evaporation in pans or other vessels, and then condensed.

After being thus obtained, the sulphate of lead is submitted to an intimate con- tact with a heated solution of potash or other alkali, in boilers or other vessels, being at the same time well stirred. The proportion of the alkali to the sulphate is about three per cent., and the time required for this operation about two or three hours. The effect of this alkali (which may be either potash or soda or both) is to deprive the sulphate of a portion of the sulphuric acid held in com- bination with it, and thereby produce a new article, which possesses qualities superior to the best white lead of commerce hitherto known; this is then washed in vats, and collected and dried at a low temperature, by heating in pans or on shelves, in a building expressly constructed for air-drying. The proportion of the ingredients employed may be varied, and very similar results may be obtained by the use of other alkalies, or the salts of these materials. The constitution of the sulphate may also be first changed into carbonate of lead, by the use of either carbonate of potash, soda, or lime, and finally treated with the alkaline solution. An alkaline effect on this sulphate is also produced by the direct use of the car- bonate of soda or potash, without the after treatment by the alkaline solution, and gives about the same results. The great objection to precipitated salts of lead as hitherto produced has been the crystalline structure of the particles, which crystalline structure is owing to a large percentage of acid and water absorbed and held in the composition of the said salts. This non-opacity destroys the pro- perty known as body, and prevents the after formation of an oleate of lead.

In the production of these salts, according to Messrs. Bell and Fell's invention a precipitate is obtained highly opaque and free from crystals, and its production is effected with a great saving in the amount of alkali used. A solution or salt of lead being obtained by any of the well-known methods, a precipitant is prepared by intimately mixing about 10 parts of hydrochloric acid of 18° Beaumé with about 90 parts of sulphuric acid of 60° Beaumé, adding more or less water. This prepared precipitant is then gradually introduced into a solution of lead, derived by placing oxide in nitric acid or acetic acid, or other solvents of lead, contained in vessels capable of resisting the action of acids, such as tanks lined with closely- rolled sheet lead, glass, or rubber, and the whole is well agitated by any suitable means adapted for continual stirring. Sulphuric acid used separately produces a very crystalline white lead; such is also the case with respect to muriatic acid. The latter acid when used alone imparts to the lead an impure colour, while the combination of these two acids gives a brilliant and opaque white lead, free from crystals, and much whiter than is obtained by the use of either acid alone. This precipitate or product requires only a very short process to render it superior to the white lead now in use in respect to body, colour, and the property of forming an oleate with oil. The proportions of the materials above given, though found to be the best in practice may be varied, without materially affecting the results.

To convert the crude sulphate of lead into a merchantable white lead, the treat- ment with an alkali is resorted to. The precipitated sulphate is of inferior value, on account of its crystalline structure and want of what is termed body or spread- ing quality. These defects are entirely removed by the mode of treatment herein described, and a fine close-grained white lead is the result. To reach this end, and obtain a product which is superior to the best white lead of commerce, they sub- mit this sulphate to an intimate contact with an alkali solution, contained in boilers or other vessels, and boil it from two to three hours, the proportion of the alkali to the sulphate being about three per cent. The effect of the alkali is to deprive the sulphate of a portion of its acid and water in combination there- with, and thereby produce a new article, with qualities as above stated. This product is next well washed with water, and subjected to the action of an hydraulic press, for the purpose of solidifying the mass to facilitate handling, and after- wards dried on pans in warm chambers, or in any other convenient manner. The above proportion of alkali is the most advantageous, but may be somewhat varied. An alkaline effect will also be produced on the sulphate by the use of any one of the alkaline compounds. When treating the basic chloro-sulphate of lead, so as to obtain a very fine and pure white lead, the process last mentioned is followed, except that only a very small percentage of alkali need be used with this sulphate, thereby causing a great saving in alkali. This precipitate with- out the alkali treatment is quite opaque or free from crystals, is much finer grained, and whiter than any heretofore obtained, and may be used for the ordi- nary purposes to which white lead is applied, but with such subsequent treat- ment a very superior article is produced.

TREATMENT OF ZINC ORES.

Some important improvements in the reduction of zinc ores for the manufacture of spelter, and in the utilisation of the products resulting therefrom, have been patented by Mr. CHARLES CROCKFORD, of Holy- well. His invention consists in utilising the sulphur contained in the sulphide of zinc, and which is now wasted. He proposes to charge the ore, having first crushed it to a sufficient degree of fineness, into a close furnace or series of retorts or chambers, which are heated externally, and he keeps the ores almost constantly stirred with rakes, which are kept in motion by machinery, thus presenting fresh surfaces of the mineral to the action of the atmospheric air, which is permitted to enter at the mouth of the said retorts or chambers through openings by which the handles of the rakes pass; sulphurous acid gas is thus generated, which is carried off by means of a flue at the other end of the said retorts or chambers, under regulation by a damper, and the vapour is thus utilised. From the fact of the sulphide of zinc requiring a large excess of atmospheric air for its perfect calcination, the sulphurous acid gas generated by the process of calcination is not economically available for being condensed in the leaden chambers in which sulphuric acid is manufactured. He, therefore, proposes to conduct the sulphurous acid gas generated in the retorts into kilns containing iron or copper pyrites, or into a chamber containing sulphur; the aforesaid iron or copper pyrites or sulphur thereby becoming ignited gives off sulphur vapour, and the diluted gas is thus charged with the necessary additional sulphur, and is then conducted into the ordinary leaden chamber, and converted into sulphuric acid; and by calcining the sulphide of zinc in a close roaster or retort, keeping the ore continually stirred, and impregnating the diluted gas with additional sulphur vapour, he is enabled to utilise the sulphur contained in the sulphide of zinc. Sometimes he conducts the sulphurous acid gas into a close chamber, heated if necessary, containing sulphide of zinc, which is kept stirred if required, and thereby becomes partially calcined, and by parting with a portion of its sulphur enriches the diluted gas, the completion of the calcination being effected afterwards.

The close roaster above mentioned is not an absolute necessity, as the same process may be applied to the ordinary reverberatory furnace in which the sul- phide of zinc is calcined. With regard to the construction of furnaces for the reduction of zinc ores he proposes, instead of constructing them in the ordinary manner, and heating a chamber containing a limited number of retorts by a single fire, to place in a horizontal chamber any convenient number of retorts in blocks or sets, with a fire-place, the bars of which are parallel with the retorts between each block or set, so that the heat abstracted from the products of com- bustion in the first fire-place is supplied or made good by the combustion of the fuel in the second fire-place, and so on, and by this means considerable economy in the consumption of fuel is effected. By this construction of furnace he is enabled to heat a double set of retorts, placed back to back, the length of the fire being parallel with the retorts instead of transverse thereto, as in furnaces hitherto used; moreover, by placing the fire-place in advance of instead of im- mediately under the retorts, the injury or destruction which occurs to the lowest row of retorts immediately over the fire is avoided, and the flame and heat from the fuel on the grate is caused to act more uniformly.

An invention for treating flux skimmings has also been provisionally specified by Mr. Crockford, in carrying out which he first boils the material in one or two waters and having first drained the liquor therefrom, he grinds it in a wet state, and submits the resulting paste-like mass to pressure, whereby he is enabled prac- tically to obtain the whole of the soluable salts which it contains. Sometimes he omits the boiling. He treats the expressed liquor by one or other of the fol- lowing processes. He precipitales the zinc with milk of lime, taking care to add no more lime than shall be sufficient for its complete precipitation, and then dis- tils the liquor with additional lime, and obtains the ammonia therefrom; or after precipitating the zinc he adds an equivalent of sulphate of ammonia, and having boiled it down to dryness, sublimes the muriate of ammonia. Or, by the second process, he precipitates the zinc with carbonate of soda or sulphide of sodium, and then submits the precipitated carbonate or sulphide of zinc to pressure and ex- tract, the liquor to which is added the proper equivalent of sulphate of ammonia, and the resulting sulphate of soda is extracted by boiling until its crystals are precipitated; or the whole is boiled down to dryness, and the muriate of ammonia sublimed, while the sulphate of soda remains in the subliming pot. Or, thirdly, he precipitates the zinc with sulphide of barium, and after expressing the liquor an equivalent of sulphate of ammonia is added, whereby the sulphate of baryta is precipitated, and the liquor being expressed by pressure from this precipitate will contain only the muriate of ammonia, which may be crystallised or other- wise treated. Or, fourthly, he adds the proper equivalent of sulphate of ammonia, and after boiling down to dryness sublimes the muriate of ammonia and collects the sulphate of zinc from the subliming pot. Or, fifthly, he precipitates the oxide of zinc with ammonia, and after expressing the liquor from the precipitate, muriate of ammonia remains in the solution, which may be crystallised or other- wise treated. Or, lastly, he treats the whole of the skimmings with sulphuric acid, or the soluble salts extracted from them, in precisely the same manner as salt is treated in the manufacture of sulphate of soda, the muriatic acid being condensed, and the resulting sulphates of zinc and ammonia left in the decomposing pan may be separated by sublimation, after crystallising or boiling down to dryness.

Another part of his invention relates to an improved mode of refining dross spelter. He charges the hard spelter into the retorts of an ordinary Belgian furnace, but only fills the retort about one-half from the back end, and fills up the front part with ground coke or some inert material, and places the ordinary condensing pipe on a descent or incline, so that the condensed zinc shall not re- main in it, but run out directly into a proper receiver, whence it may be collected and afterwards melted and cast into ingots; by adopting this mode of smelting or refining the hard metal he is enabled to obtain a very pure metal, and with very little loss from oxidation. In lieu of the ordinary Belgian retort, which is cylindrical, he sometimes makes the retort of an oval or other convenient form, and before charging it with zinc, he fills it up about one-third with ground coke or some inert material, so that the iron contained in the hard spelter, instead of being deposited on the bottom of the retort, which it destroys, may remain on the said inert material, and be withdrawn therewith without injury to the retort. A third part of the invention consists in collecting and condensing the vapour arising from the galvanising bath, or the bath used or employed in coating iron with zinc. This he does by conducting the vapours given off from the bath by means of a hood or cover, and a flue or flues, into a tower filled with coke, upon and through amongst which he causes water, in a finely divided state, to fall shower- like, so that it percolates through the mass of coke, and coming into contact with the vapours condenses them. Or instead of thus using coke he connects the flue with any suitable condenser, and thus condenses and collects the vapours.

IMPROVED REGENERATIVE FURNACE.

A new means of procuring more perfect combustion in the burning of fuel has been provisionally specified by Mr. T. PETITJEAN, of Brydges-street, which consists in having a "reproducer" at the en- trance of the chimney of a furnace. The products of combustion are caused to pass through the mass of combustible material, and by the heat they evolve they ignite it. When the combustible material has developed all its heating power, its carbon is, as is well known, trans- formed into carbonic acid, and its hydrogen into aqueous vapour; When they leave the combustion chamber of the furnace to enter into the reproducer, these gases are caused to pass through the ig- nited carbon, so as to absorb a part of it, and then the bulk of carbonic acid evolved is converted into two bulks of carbonic oxide; the aque- ous vapour is in the same manner decomposed by the ignited fuel, and re-arranged into two equal bulks, one of hydrogen and the other of carbonic oxide. It must be observed here that the heating power of a bulk of hydrogen is very nearly the same as that of a bulk of carbonic oxide. It is also known that a bulk of carbonic oxide is con- verted by its own combustion into an equal bulk of carbonic acid; it is, consequently, claimed that the amount of heat given out by any fuel is always doubled in this process, however perfect the mode of combustion hitherto. The same fuel is in a continual and con- stant circulation, becoming alternately carbonic acid and aqueous vapour where the combustion is going on, then reconverted into car- bonic oxide and hydrogen at the exit of the "reproducer," to re-enter as gaseous fuel into the fire-place, and so on indefinitely. It must be thus borne in mind that by the mode which regulates the action of the process, the quantity of gaseous fuel produced by the means of his "reproducer" is double that which is necessary to heat the fur- nace; hence it evidently follows that two fire-places of equal sizes, and completely independent from each other, are necessary. The first one is provided with a "reproducer," and so continual circula- tion of the same fuel is secured; the second fire-place is arranged in the ordinary manner, and the products of combustion are thrown away by the chimney to determine the draught, if a mechanical draught is not preferred.

It appears that the great advantages of the invention are due to the circumstance that the fuel is chiefly consumed in the form of gas, from which it will be obvious that all annoyance from smoke will be effectually prevented, and that the maximum of heat-producing power will be obtained. It is mentioned that two conditions are ab- solutely requisite to obtain the entire useful effect of the new method; firstly, the air necessary to the combustion must be reduced to the quantity strictly indispensable; secondly, the action must be regular and continual. To secure those ends, the burning is effected by a great number of points on ranges of blow-pipes, supplied with air and gaseous fuel by a peculiar arrangement, which insures an in finitessimal division of the combustible material. This fractional divi- sion of the combustible material gives an easy control over the quan- tity of air to be admitted on the perfect mingling of air and gaseous fuel, and also over the regularity of the burning. The waste heat of the second furnace may be turned to use for different purposes, but not in the same manner as in the first furnace, as no gain could be obtained in that way.

PREUSSISCHE BERGWERKS UND HUTTEN-ACTIEN-GESELLSCHAFT.

PRUSSIAN MINING AND IRONWORKS COMPANY.

PAYMENT OF INTEREST UPON SHARES.

According to resolution of the Council of Supervision of the 15th instant, the INTEREST upon the fully-paid up shares of this company, calculated up to the 30th June, 1867, will be PAID on and after the 15th of August next, at the head office of the company, No. 30, Benrather-street, Dusseldorf, or at the places mentioned at foot hereof.

The holders of shares are requested to present same at the place of payment for the purpose of being stamped, and accompanied by a list of the numbers of the shares so presented.

The interest will be paid in accordance with a detailed calculation, to be seen at the place of payment, and upon a receipt being given in the form which will be supplied there.

The places of payment in England and Ireland are—London: The National Bank, 13, Old Broad-street. Cork: The Cork Steamship Company's Office.

Dusseldorf, the 20th July, 1867. THE DIRECTION.

PREUSSISCHE BERGWERKS UND HUTTEN-ACTIEN-GESELLSCHAFT.

PRUSSIAN MINING AND IRONWORKS COMPANY.

Issue of shares. Second series, 2000 shares of 200 thalers, or £30 each.

Agreeably with the conditions of par. 5 of our Statute, the undersigned Council of Supervision has resolved, after the shares of the first series have been paid up, to issue

THE SECOND SERIES OF 2000 SHARES (400,000 thalers = £60,000).

The shares will be issued at par, and according to par. 5 of the statute, "the holders of the shares already issued have the right, each in proportion of the number of shares held by him, to take the new shares at the course of issue to be fixed by the Council."

Shareholders who wish to avail themselves of this right are requested to signify such intention in writing to the direction of the company, at No. 30, Benrather-street, Dusseldorf, on or before the 20th of August next, accompanied by a specification of the numbers of shares of first series now held by them, and a remittance of the amount of the first call of 10 per cent., or £3 per share, upon the number of new shares applied for.

Shareholders wishing to take more than their *pro rata* number of new shares will please remit the amount of the first call upon the whole number applied for. In the allotment of the disposeable shares such applications shall receive the preference. Should it be found necessary to reduce the subscription, it shall be done *pro rata*, and in such case the amount of the first call on the number of shares not allotted shall be returned.

According to the Statute, shareholders who shall not have made their application within the period above mentioned cease to have a claim to allotment of the new shares.

Upon allotment and payment of the first call, forms of receipt (Quittungsbogen) will be issued to the allottees.

The second call of 10 per cent., or £3 per share, will be payable on 30th September, and the third call of 20 per cent., or £6 per share, on 30th November of this year, at our head office here or by any of the undermentioned bankers.

Further notice will be given of the periods when the remaining calls shall be made payable. THE COUNCIL OF SUPERVISION.

Dusseldorf, the 20th July, 1867.

The bankers of the company are—for England and Ireland: The National Bank, and its branches.

ENGLISH AND AUSTRALIAN COPPER MINING COMPANY

(LIMITED).—Notice is hereby given that an EXTRAORDINARY GENERAL MEETING of the shareholders of this company will be HELD on THURSDAY, the 1st day of August, at Two o'clock, at the London Tavern, Bishopsgate-street, London, for the purpose of receiving a statement of the company's affairs since the last general meeting.

By order, CHARLES B. ROGERS, Secretary.

Offices, 6, Gracechurch-street, London, E.C., 24th July, 1867.

N.B.—The tranfer-books will be closed on Thursday, the 25th day of July, and re-opened on Friday, the 2d proximo.

THE WORTHING MINING COMPANY (LIMITED).—

Notice is hereby given that the ANNUAL GENERAL MEETING of shareholders in the Worthing Mining Company (Limited), will be HELD at the office of the company, on MONDAY, August 12th, at Two o'clock in the afternoon precisely.

To receive the directors' report and the accounts and balance-sheet for the past year.

To elect two directors in the room of C. Legg, Esq., and H. R. Wotton, Esq., going out of office by rotation, but who are eligible for re-election, and offer themselves accordingly.

To fix the remuneration to be paid to the auditors for the past year.

To elect auditors in lieu of I. B. Elkin, Esq., and C. Ehrensperger, going out of office, but who offer themselves for re-election.

And to transact the ordinary business of the company.

W. J. LAVINGTON, Sec.

63, Bishopsgate-street Within, E.C., London, 26th July, 1867.

TAQUARIL GOLD MINING COMPANY (LIMITED),

IN THE PROVINCE OF MINAS GERAES, BRAZIL.

Capital, £100,000, in shares of £1 each.

2s. 6d. per share on application, 2s. 6d. per share on allotment.

No call to be made at a less interval than three months,

or to exceed 2s. 6d. per share.

CHAIRMAN.

H. BIRT, Esq., formerly of the St. John del Rey Mining Company.

BANKERS.

The Consolidated Bank (Limited), 52, Threadneedle-street, London, E.C.

BROKERS.

Messrs. Walker and Lumsden, 25, Austinfriars, London, E.C.

Messrs. G. and T. Irvine, India Buildings, Liverpool.

SECRETARY—Edward J. Cole, Esq.

OFFICES,—2, NEW BROAD STREET, LONDON, E.C.

Prospectuses and reports, containing the fullest information, to be had of the secretary, or the brokers of the company.

TAQUARIL GOLD MINING COMPANY (LIMITED).—

Notice is hereby given that the LIST OF APPLICATIONS FOR SHARES will be CLOSED on WEDNESDAY, the 31st inst.

By order of the Board, EDWARD J. COLE, Secretary.

2, New Broad-street, London, July 19, 1867.

THE MID-WALES LEAD MINING COMPANY (LIMITED).

Capital, £15,000, divided into 6000 shares of £2 10s. each.

Deposit—On application, 10s. per share, and upon allotment, 10s. per share.

No call will exceed 10s. per share.

DIRECTORS.

Col. BOULDERSON (late Madras Army), Southsea, Hants.

HAMERTON CRUMP, Esq. (Director of the Paraguassu Steam Tram-road Co., Limited), 117, Cannon-street, E.C. and Piccadilly, W.

WILLIAM J. LINDSAY, Esq. (Messrs. Grant, Kempsnead, and Co.), 46, Lime-street, E.C.

JOSEPH NIGHTINGALE, Esq. (lateH.M.'s Civil Service), 45, Cambridge-road, Kilburn.

JOB TAYLOR, Esq., Dixon's Green, Dudley (Chairman of the Central Snailbeach Lead Mining Company, Limited, and the Brynpostig Lead Mining Company, Limited).

No remuneration will be received by the directors until it is voted to them by the shareholders.

BANKERS.

The National Provincial Bank of England, Bishopsgate-street, London.

CONSULTING ENGINEER.

Capt. John Kitto (late of Great Laxey Mines), Shrewsbury.

SECRETARY—Mr. E. Houghton.

OFFICES,—3, KING WILLIAM STREET, CHARING CROSS, LONDON.

PROSPECTUS.

This company has been formed for the purpose of acquiring the leases and extending the works of a valuable lead mine, situated in the richest lead district in North Wales, long celebrated for its immense yield of lead ores.

The mine is situated in the parishes of Llangurig and Llandinam, in the county of Montgomeryshire, adjoins the Tylwch station of the Mid-Wales Railway, and is held under lease, upon very moderate terms, for 21 years.

A large amount of valuable work is already done, two rich lodes have been opened upon by means of adit levels, and a quantity of silver-lead ore obtained; the deepest level has been driven about 100 fms., and the end of it is now within a few fathoms of a rich bunch of lead which was discovered when sinking a small shaft on the top of the hill.

So satisfied are the present owners of the real *bona fide* value of this property, that they have agreed to sell their entire interest for the moderate sum of £6500; of this sum £500 only will be paid in cash, £5500 in fully paid-up shares, and the balance of £500 will be paid twelve months after registration of the company.

The Memorandum and Articles of Association contain no unusual clauses, and can be inspected at the offices of the company.

If no allotment is made the deposit will be promptly returned without deduction.

Applications for shares, with a cheque or Post-office Order for the deposit of 10s. per share, can be sent either to the bankers, brokers, or secretary.

No application for less than five shares will be entertained, and the allotments will be made according to priority of application.

Samples of the ores can be seen either at the offices or at the brokers.

Full prospectuses, with reports by Capt. John Kitto, late of the Great Laxey Mines, and Capt. Nancarrow, of the Stiperstones Mining Company (Limited), can be had on application to the Secretary at the company's offices.

JOHN HOCKING AND SON, ENGINEERS, REDRUTH,

CALL the ATTENTION of COLLIERY PROPRIETORS and others to the present favourable opportunities for the purchase of secondhand CORNISH PUMPING ENGINES and BOILERS at cheap rates. Plans, valuations, removal, &c., of every description of mining machinery undertaken.

FOR SALE, ONE 36 in. PUMPING ENGINE, also an excellent CRUSHER.

SHAREHOLDERS IN PUBLIC COMPANIES desirous of

avoiding calls and further responsibility will find purchasers on applying to Messrs. BARRETT AND CO., 78, LOMBARD STREET, CITY, and No. 20, SPRING GARDENS, CHARING CROSS. Stocks, shares, mining, and other miscellaneous securities bought and sold. Investment Review on application. Cash advances made.

ROBERT LIBBY AND SON,

MINE AND SHAREDEALERS, &c.,

CAMBORNE, CORNWALL.

In the Court of the Vice-Warden of the Stannaries.

Stannaries of Cornwall.

IN the MATTER of the COMPANIES ACT, 1862, and of the GODOLPHIN HILL MINING COMPANY (LIMITED).—The Registrar of this Court has appointed FRIDAY, the 2d day of August next, at Eleven o'clock in the forenoon, at his office at Truro, to SETTLE the LIST OF CONTRIBUTORIES of the ABOVE-NAMED COMPANY, now made out and deposited at the said office. WILLIAM MICHELL, Registrar of the said Court.

Dated the 13th day of July, 1867.

In the Court of the Vice-Warden of the Stannaries.

Stannaries of Cornwall.

IN the MATTER of the COMPANIES ACT, 1862, and of the ST. DAY UNITED MINING COMPANY.—The Registrar of this Court has appointed MONDAY, the 5th day of August next, at Eleven o'clock in the forenoon, at the Registrar's Office at Truro, to SETTLE the LIST OF CONTRIBUTORIES of the ABOVE-NAMED COMPANY, now made out and deposited at the said office. WILLIAM MICHELL, Registrar of the said Court.

Dated the 24th day of July, 1867.

In the Court of the Vice-Warden of the Stannaries.

Stannaries of Cornwall.

IN the MATTER of the COMPANIES ACT, 1862, and of the NORTH HALLENBEAGLE TIN AND COPPER MINING COMPANY (LIMITED).—By the direction of His Honour the Vice-Warden, notice is hereby given, that on Monday, the 5th day of August next, at the Registrar's office, at Truro, in the county of Cornwall, at Eleven o'clock in the forenoon, this Court will PROCEED to MAKE a CALL of SIX SHILLINGS AND SIXPENCE PER SHARE on all the contributories of the said company settled on the list of contributories thereof under class A. All persons interested therein are entitled to attend at the time and place aforesaid to offer objections to such call.

WM. MICHELL, Registrar of the said Court.

Dated this 25th day of July, 1867.

In the Court of the Vice-Warden of the Stannaries.

Stannaries of Cornwall.

IN the MATTER of the COMPANIES ACT, 1862, and of the WHEAL SITHNEY AND CARNMEAL UNITED MINING COMPANY.—ALL CREDITORS or CLAIMANTS of the ABOVE-NAMED COMPANY who have not received notice from the Registrar of the said Court that their claims have been already admitted, are hereby REQUIRED to COME IN and PROVE THEIR SEVERAL DEBTS or CLAIMS at the Registrar's office, Truro, on Tuesday, the 6th day of August next, at Eleven o'clock in the forenoon, or in default thereof they will be excluded from the benefit of any distribution made before such proof, and for the purpose of such proof they are either to attend in person or by their solicitors or competent agents, or (unless such attendance be required by the Registrar's summons) they are to send affidavits of their several debts or claims to the Registrar of the Court at Truro, such affidavits being sworn either before some Commissioner of the said Court, or before any Court, Judge, Justice, or any Commissioner of one of the Superior Courts lawfully authorised to take and receive affidavits and affirmations.

WM. MICHELL, Registrar of the above-named Court, Truro, Cornwall.

Dated Registrar's Office, Truro, July 24, 1867.

In the Court of the Vice-Warden of the Stannaries.

Stannaries of Cornwall.

IN the MATTER of the COMPANIES ACT, 1862, and of the TRESKERBY MINING COMPANY.—ALL CREDITORS or CLAIMANTS of the ABOVE-NAMED COMPANY who have not received notice from the Registrar of the said Court that their claims have been already admitted, are hereby REQUIRED to COME IN and PROVE THEIR SEVERAL DEBTS or CLAIMS at the Registrar's office, Truro, on Monday, the 12th day of August next, at Eleven o'clock in the forenoon, or in default thereof they will be excluded from the benefit of any distribution made before such proof, and for the purpose of such proof they are either to attend in person or by their solicitors or competent agents, or (unless such attendance be required by the Registrar's summons) they are to send affidavits of their several debts or claims to the Registrar of the Court, at Truro, such affidavits being sworn either before some Commissioner of the said Court, or before any Court, Judge, Justice, or any Commissioner of one of the Superior Courts lawfully authorised to take and receive affidavits and affirmations.

WM. MICHELL, Registrar of the above-named Court, Truro, Cornwall.

Dated Registrar's Office, Truro, July 24, 1867.

DEVON.

FURZE HILL WOOD MINE, HORRABRIDGE, NEAR TAVISTOCK.

MR. W. J. MAY WILL SELL, BY AUCTION, at the Roborough Inn, Horrabridge (on such conditions as will be produced), on Tuesday, the 30th of July inst., at Three o'clock P.M., in One Lot, the LEASE of the above MINE, together with the very valuable MACHINERY thereon, viz.:—

A very superior 24 inch cylinder ROTARY ENGINE, with BOILER about 10 tons, one fly-wheel 24 ft. diameter, sweep rod and other connections, all of the best construction and in excellent condition; one cast-iron stamp axle carrying twelve heads, iron lifters with frames complete, in good working order; one crab winch, shears, poppet heads, several flat rods, angle and balance bob, pulleys, stands and wheels, two 4-ft. and other shieves; 70 fms. of 7, 8, and 10in. pitwork; 40 fms. of 7-in. wood rods, plates, pins, staples and glands; 130 fms. best whim chain; several kibbles; three tram wagons; 300 fms. train iron, screw stocks, grindstone, bellows, vice, smiths' and miners' tools, two good blocks, hand screw; beam, scales, and weights; a quantity of old iron; dressing-floors, with buddles, &c.; one water-wheel to work round buddles; dressing tools, &c.; one water-wheel, 30 ft. by 3 ft. 6 in., with a first-class new drawing machine; a 12 head stamp, with iron lifters, large and small launders, and the usual requisites of a tin mine.

For viewing the same apply on the mine; and for further particulars to the Auctioneer, 4, Mutley-plain, Plymouth.

At the above mine sufficient ore is now being raised to pay labour cost. The plant, which is of first-rate quality, is in rare working order; and the principal difficulties incident to mining operations being overcome, an opportunity is now offered to capitalists rarely to be met with.

4, Mutley-plain, Plymouth, July 5, 1867.

TO IRON AND COALMASTERS.

IMPORTANT IRONWORKS AND COLLIERIES FOR SALE

IN THE SOUTH STAFFORDSHIRE DISTRICT.

MESSRS. JOSEPH COOKSEY AND SON WILL SELL, BY AUCTION, at the Hen and Chickens Hotel, Birmingham, on Thursday, the 1st day of August, 1867, at Five o'clock in the afternoon, the undermentioned VALUABLE ESTATES, at OLDBURY, near BIRMINGHAM, in the following or such other lots as may be agreed upon at the time of sale, and subject to such conditions as will be then produced:—

LOT 1.—All those FOUR BLAST FURNACES, with BLAST ENGINES, HOT BLAST APPARATUS, and HYDRAULIC LIFT, capable of producing 600 tons of pig-iron per week, together with FURNACE INCLINE and ENGINE, commodious coke and calcining hearths, and deposit room for cinders, tramways, canal basins and wharves, offices, fitting-shops, foundry, stables, manager's house, and other necessary erections and extensive frontages to the Birmingham Canal. Also several pairs of pit shafts, TWO STEAM ENGINES, and other colliery plant and erections, with land appurtenant thereto, comprising altogether an area of 23A. OR. 16P. of surface LAND, or thereabouts, late in the occupation of William Bennett, Esq., together with the MINES and MINERALS thereunder; and also all the MINES in and under lands belonging to Mr. P. W. Bennett, except the mine of clay, part of the Birmingham Canal, and a moiety of the turnpike-road and Furnace-street, adjoining the property, containing together an area of 6A. 2R. 36P. The land has good frontages to the turnpike-road from Dudley to Birmingham, and to Furnace-street, and is well adapted for sites for iron and other works requiring canal accommodation.

LOT 2.—All that COLLIERY at ROWAY LANE, OLDBURY, in the county of WORCESTER, with the STEAM ENGINE, COLLIERY ERECTIONS, PIT SHAFTS, LAND, and PREMISES, late in the occupation of Messrs. Partridge and Turnley, containing, with the sites of dwelling-houses and premises hereinafter mentioned, 9A. 3R. 22P., or thereabouts, together with the ungotten MINES and MINERALS thereunder. And also all those TWO DWELLING HOUSES, LAND, GARDENS, and PREMISES thereto belonging, in the respective occupation of Hannah Payne and Thomas Boswell.

Parts of both lots are of freehold tenure, and the remaining parts thereof are of copyhold tenure, of the Manor of Oldbury.

For an order to view, apply to Mr. JAGGER, bank manager, or Mr. CHAMBERS, timber merchant, both of Oldbury, and for further particulars and plans to Messrs. BOURNE and OWEN, Solicitors, Dudley; Messrs. INGLEBY, WRAGGE, and EVANS, Solicitors, Birmingham; or the Auctioneers, at West Bromwich.

FIFTY MOUNTAIN PONIES, THIRTY OF THEM SUITABLE FOR COLLIERY PROPRIETORS, THE REST WELL-BRED PONIES FOR CHILDREN, AND WELL-MATCHED PAIRS, &c.

MESSRS. LUCAS AND CO., of the REPOSITORY, LIVERPOOL, expect a consignment of upwards of FIFTY PONIES to arrive in Liverpool in about a week from Iceland, and, as at present arranged, they will BE SOLD BY AUCTION before the end of the month.

Colliery proprietors and others sending their address to Messrs. LUCAS and Co., will be duly informed of the time of sale, and where they may be viewed.

ABERNANT IRONWORKS,

GLYNNEATH, GLAMORGANSHIRE.

THE STEAM-ENGINES, and other MOVEABLE PLANT and EFFECTS, WILL BE OFFERED FOR SALE, BY AUCTION, at the works, by Mr. J. M. LEEDER, on Thursday, the 8th day of August, and following days.

Catalogues may be obtained on application to Mr. HENRY ALLEN, Neath Abbey, Neath; or of the Auctioneer, 16, Caer-street, Swansea.

STEAM-BOILERS made by WILLIAM WILSON, LILYBANK BOILER WORKS, GLASGOW, on the most improved principles, for home and export. All boilers made of the best material and workmanship, proved and warranted tight under a high pressure, and delivered at any railway station or shipping port in the kingdom at moderate rates. Lithograph of boilers orwarded post-free on application.

IMPORTANT SALE OF A SLATE AND SLAB QUARRY,

WITH MACHINERY, PLANT, TRAMWAY, &c., and a quantity of SLABS,

AT PENMACHNO, CARNARVONSHIRE.

MR. W. DEW WILL SELL, BY AUCTION, on Saturday, the 31st day of August, 1867, at Three o'clock P.M., at the Queen Hotel, Chester,

THE HAFODWRYD SLATE AND SLAB QUARRY,

With MACHINERY, PLANT, TRAMWAY, &c., situate at PENMACHNO, CARNARVONSHIRE, and distant four miles from the Bettws-y-Coed Station of the London and North-Western Railway.

The surface contains 415A. 2R. 13P., and from reports made by several gentlemen of undoubted experience and ability, the slate formation underlies the whole of it. It is held on a lease for a term of 21 years, from the 24th March, 1860, with power to renew for a like term on payment of the sum of £300. The royalty is moderate, being 1-15th, and the dead rents are as follow:—£10 per annum for the first five years (now expired), £20 per annum for the second five years, £30 per annum for the third five years, and £50 per annum for the last six years, such dead rents to merge in the royalty.

The quarry has been partially opened and worked, producing slabs of good size, and very suitable for all purposes; but, owing to inadequate capital, the local company were unable to carry out fully the intention of developing it.

The Llanrwst branch of the London and North-Western Railway is now extended to Bettws-y-Coed, four miles from Penmachno, and the same company have made a survey from Bettws through the estate, and within 200 yards of the quarry. There is ample water-power; and it is believed that a moderate capital would suffice for developing a large and profitable quarry.

The estate has upon it an excellent MANSION, beautifully situated, and this, together with shooting and fishing, could be arranged for on easy terms (the present owner not residing there), affording an opportunity seldom met with of combining business and pleasure. The PLANT and MACHINERY consists of a WATER-WHEEL 16 feet diameter, TWO SAWS, and ONE PLANING MACHINE, a large quantity of TRAM RAILS, IRON WAGONS, &c.

The purchaser of the lease to have the option of taking the plant, machinery, &c., at a valuation, otherwise they will be sold in separate lots. A quantity of slabs will be sold at the same time.

For catalogues and other particulars apply to Mr. MARTIN SMITH, Vale-street, Denbigh; and to the Auctioneer, Wellfield House, Bangor.

To see the property enquire at the Horse Shoe Inn, Penmachno.

TO BE SOLD, at the SEVERN COPPER AND LEAD MINES,

near LLANIDLOES, for £200, all that new and substantial and well-built MACHINERY, consisting of—

ONE WATER-WHEEL, 45 feet high, about 4 feet 6 inches breast;

DRAWING MACHINE, upon the best principle;

ONE STEEL WIRE ROPE, 400 fathoms long, ¾ in. diameter, and

ONE CAPSTAN.

The other machinery is open for offers for further portions.

For orders to view the same, address to JOSEPH JUKES, Birkenhead; or apply upon the works.

LATCHLEY CONSOLS AND SOUTH WHEAL MARIA MINES.

FOR SALE, BY PRIVATE CONTRACT, the LATCHLEY

CONSOLS AND SOUTH WHEAL MARIA MINES, CALSTOCK, CORNWALL, with a 50-in. cylinder PUMPING ENGINE, HAULING MACHINE, and MATERIALS, all in complete working order.

To view the same, and for further particulars, apply to Capt. JAMES RICHARDS, Devon Great Consols, Tavistock.

Offers for purchase will be received by Messrs. BARLOW and SMITH, solicitors, 39, Waterloo-street, 4 Birmingham, up to 3d August next.

FOR SALE, and may be seen at the Ashburton Mines, ONE

56 in. PUMPING ENGINE, with TWO 11 ton CORNISH made BOILERS. ONE 40 in. PUMPING ENGINE, only made a short time, and as good as new, with an 11 ton BOILER. A 24 in. WHIM ENGINE, with stamps attached. ONE 11 ton BOILER. Several WATER-WHEELS of various sizes, one with a very excellent drawing machine attached. Pumps and materials of all sorts and sizes.—Application may be made to Mr. W. MATHEWS, engineer, Tavistock, or an be seen on application to people in charge of the mine.

NICHOLLS, MATHEWS, AND CO., ENGINEERS,

BEDFORD IRONWORKS, TAVISTOCK.

MANUFACTURERS of STEAM ENGINES of EVERY DESCRIPTION, made on the BEST and NEWEST PRINCIPLES. We beg more especially to call the attention of the public to the MANUFACTURE of our BOILERS, which have been tested by most of our leading engineers. PUMP WORK CASTINGS of EVERY DESCRIPTION, both of brass and iron. HAMMERED IRON and HEAVY SHAFTS of ANY SIZE. CHAINS made of the best iron, and warranted. MINERS' TOOLS and RAILWAY WORK of EVERY DESCRIPTION.

ALL ORDERS FOR ABROAD RECEIVE their BEST ATTENTION. NICHOLLS, MATHEWS, and Co. have had 20 years' experience in supplying machinery to foreign mines, and selecting experienced workmen to erect the same, where required.

Messrs. NICHOLLS, MATHEWS, and Co. have always a LARGE STOCK of SECOND-HAND MINE MATERIALS in stock, and at moderate prices.

FOR SALE.—A LIFT of 16-in. PUMPS and BOTTOMS, all in

excellent order; a quantity of hammered iron STRAPPING PLATES, all in excellent condition. Also, a 40-in. PUMPING ENGINE, only worked a few months; and a WATER-WHEEL, nearly new.—Application to NICHOLLS, MATHEWS, and Co., Bedford Ironworks, Tavistock.

WILLIAMS'S PERRAN FOUNDRY COMPANY,

PERRANARWORTHAL, CORNWALL.

MANUFACTURERS of STEAM PUMPING and EVERY OTHER KIND of ENGINES, together with BOILERS, PUMP CASTINGS, and MINING TOOLS of every description, of the very best quality. Estimates given for the supply of any amount of machinery.

London Agent.—Mr. EDWARD COOKE, 76, Old Broad-street, London, E.C.

RAILWAY CARRIAGE COMPANY (LIMITED)

ESTABLISHED 1847.

OLDBURY WORKS, NEAR BIRMINGHAM.

MANUFACTURERS of RAILWAY CARRIAGES and WAGONS, and EVERY DESCRIPTION of IRONWORK.

Passenger carriages and wagons built, either for cash or for payment over a period of years.

RAILWAY WAGONS FOR HIRE.

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MANUFACTURERS of RAILWAY CARRIAGE, WAGON, and CONTRACTORS' WHEELS and AXLES, and other IRONWORK, used in the CONSTRUCTION of RAILWAY ROLLING STOCK.

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MANUFACTURE RAILWAY WAGONS of EVERY DESCRIPTION, for HIRE and SALE, by immediate or deferred payments. They have also wagons for hire capable of carrying 6, 8, and 10 tons, part of which are constructed specially for shipping purposes. Wagons in working order maintained by contract.

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PATENT FLEXIBLE TUBING,

AND BRACTICE CLOTH FOR MINES,

MANUFACTURED BY

ELLIS LEVER,

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WEST GORTON WORKS, MANCHESTER.

TO COLLIERY PROPRIETORS.

BEST CHARCOAL IRON AND STEEL WIRE ROPES,

Also HEMP ROPES, for MINING PURPOSES.

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CHAPLIN'S PATENT STEAM ENGINES AND BOILERS

OF EVERY CLASS, FOR SALE OR HIRE, at the ENGINEERING WORKS,

No. 19, CORNWALL ROAD, LAMBETH, LONDON, S.

(Opposite Waterloo Railway Station.)

THE SEACOMBE FORGE RIVET AND BOLT COMPANY

MANUFACTURERS OF

BOLTS RIVETS, WASHERS, COACH SCREWS, SPIKES, SET PINS, TIE RODS, COTTER PINS, &c.;

ALSO,

ENGINEERS' AND SHIPBUILDERS' FORGINGS, SMITHS' WORK, and every description of SHIPS' FASTENINGS.

WORKS,—SEACOMBE, NEAR BIRKENHEAD.

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GARNOCK BIBBY, AND CO.,

CHAPEL STREET, LIVERPOOL,

MANUFACTURERS of FLAT and ROUND HEMP and IRON and STEEL WIRE ROPES for MINING, RAILWAY, and SHIPPING PURPOSES.

MANILLA ROPE of SUPERIOR QUALITY, FIFTY PER CENT. STRONGER and THIRTY PER CENT. CHEAPER than Russian hemp rope.

WIRE ROPE of FIRST QUALITY WIRE, and the HIGHEST STANDARD of STRENGTH.

NOTICE.—CAPT. S. M. RIDGE, of LLANIDLOES,

MONTGOMERYSHIRE (late manager of the Brynpastig and Cwm Fron Mines, and owners, in Shropshire and Wales), is NOW OPEN to INSPECT and faithfully REPORT UPON ANY LEAD MINE in either of these localities that may be confided to his care, having had better than 30 years' experience in lead mining, as miner and agent.—Address, Capt. S. M. RIDGE, Llanidloes, Montgomeryshire.

BICKFORD'S PATENT SAFETY FUSE

Obtained the PRIZE MEDALS at the ROYAL EXHIBITION of 1851; at the INTERNATIONAL EXHIBITION of 1862, in London; at the IMPERIAL EXPOSITION held in Paris, in 1855; and at the INTERNATIONAL EXHIBITION, in Dublin, 1865.

BICKFORD, SMITH, AND CO., of TUCKINGMILL, CORNWALL, MANUFACTURERS of PATENT SAFETY-FUSE, having been informed that the name of their firm has been attached to fuse not of their manufacture, beg to call the attention of the trade and public to the following announcement:—

EVERY COIL of FUSE MANUFACTURED by them has TWO SEPARATE THREADS PASSING THROUGH the COLUMN of GUNPOWDER, and BICKFORD, SMITH, AND CO. CLAIM SUCH TWO SEPARATE THREADS as THEIR TRADE MARK.

PRENTICE'S GUN COTTON

COMPRESSED CHARGES

FOR MINING AND QUARRYING.

The principle thus introduced insures the most perfect attainment of the points essential for the safety and stability of the material, at the same time securing the highest effective power. A charge of any given size exerts six times the explosive force of gunpowder.

The enormous power confined in a short length at the bottom of the hole allows of a much greater amount of work being placed before each blast, saving considerably in the labour of drilling.

Charges are made of every diameter required, the length varying with the diameter. Any number may be placed in a hole. Each charge is fully equal to one-fifth of a pound of powder.

PRICES.

Per case, containing 500 charges of any diameter	35s.
Per half case, containing 250 charges of any diameter	18s.
Per quarter case, containing 125 charges of any diameter	9s.

Terms,—cash.

MANUFACTURED BY

THOMAS PRENTICE AND CO., 82, GRACECHURCH STREET, LONDON.

WORKS, STOWMARKET.

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JOHN AND EDWIN WRIGHT,

PATENTEES.

(ESTABLISHED 1770.)

MANUFACTURERS OF EVERY DESCRIPTION OF IMPROVED

PATENT FLAT AND ROUND WIRE ROPES,

From the very best quality of charcoal iron and steel wire.

PATENT FLAT AND ROUND HEMP ROPES.

SHIPS' RIGGING, SIGNAL AND FENCING STRAND, LIGHTNING CONDUCTORS, STEAM PLOUGH ROPES (made from Webster and Horsfall's patent steel wire), HEMP, FLAX, ENGINE YARN, COTTON WASTE, TARPAULING, OIL SHEETS, BRATTICE CLOTHS, &c.

UNIVERSE WORKS, MILLWALL, POPLAR, LONDON.
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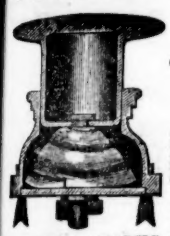
No. 2, OSWALD STREET, GLASGOW.
CITY OFFICE No. 5, LEADENHALL STREET, LONDON, E.C.

THOMAS TURTON AND SONS,



MANUFACTURERS OF

CAST STEEL for PUNCHES, TAPS, and DIES, TURNING TOOLS, CHISELS, &c.

CAST STEEL PISTON RODS, CRANK PINS, CONNECTING RODS, STRAIGHT and CRANK AXLES, SHAFTS and FORGINGS of EVERY DESCRIPTION.

DOUBLE SHEAR STEEL	FILES MARKED
BLISTER STEEL,	T. TURTON.
SPRING STEEL,	EDGE TOOLS MARKED
GERMAN STEEL,	WM. GREAVES & SON.

Locomotive Engine, Railway Carriage and Wagon Springs and Buffers.

SHEAF WORKS AND SPRING WORKS, SHEFFIELD.

LONDON WAREHOUSE, 35, QUEEN STREET, CANNON STREET, CITY, E.C., Where the largest stock of steel, files, tools, &c., may be selected from.

APPLEBY'S SOVEREIGN PUMP, and other LIFT or FORCE PUMPS, with their PATENT CONICAL VALVES and imperishable packings, are simple, durable, effective, easily fixed. Suitable for deep or shallow wells, for house, agricultural, or manufacturing purposes. Will pump hot water, alkalies, and other chemicals which destroy ordinary pumps. From 20s. each.

APPLEBY BROTHERS, Emerson-street, Southwark, or of all ironmongers and plumbers.

DŒRING'S PATENT ENGINE FOR TUNNELLING

MINING, QUARRYING, and BLASTING in OPEN CUTTING.

A SAVING of THIRTY to SIXTY PER CENT. in labour effected where the cost of adit exceeds £6 per fathom.

TIME for DRIVING ADIT REDUCED FIFTY to SEVENTY-FIVE per cent.

"These drilling engines are in daily use at the zinc mines of the Vieille Montagne," &c.—*Times*, Dec. 24, 1866.

"One of these machines was shown to work in an exceedingly satisfactory manner upon hard granite."—*Engineering*, Dec. 21, 1866.

Particulars may be obtained of Mr. DŒRING, or Mr. GROVER, 30, Duke-street, Westminster.

UTILISATION OF COAL DUST.

BARKER'S PATENTS.

THE LONDON PATENT COAL COMPANY (LIMITED) having arranged with the patentee for the exclusive right to these patents within the United Kingdom, desire to call the attention of coal owners, ironmasters, and others, to the value of the invention by which the waste and small coal can, by a simple and inexpensive process, be rendered available for all the ordinary uses of the coal from which it is derived.

A series of careful experiments have been made on the Monmouthshire Railway with fuel manufactured from the Risca Black Vein Coal (small) in locomotives working heavy mineral trains over severe gradients, by which it has been ascertained that increased duty was obtained from the fuel over the same coal. The results of these experiments are so satisfactory that Mr. Alex. Bassett, C.E., of Cardiff, has consented to act as the company's representative for granting licenses in South Wales, and will be happy to reply to all enquiries and give full explanation respecting the trials that have been made under his superintendence. Mr. Thomas D. Clare, of Birmingham, has also undertaken to represent the company in the Midland Counties, and large works are in course of erection in the Forest of Dean by the company's licensees there.

The company are prepared to grant licenses for the use of their patents, and from the success which has attended the manufacture at their own works, and the extraordinary popularity of the fuel for retail purposes amongst the lower classes, they believe that in every populous town a large and highly profitable trade may be carried on.

The cost of the ingredients used in the manufacture does not exceed 1s. per ton; they contain no pitch, tar, or other nauseous substance, and the manufacture is not more expensive than ordinary brick-making.

The blocks are available for every purpose of ordinary coal, and stow in one-fourth less space (1 ton of fuel occupying 33 cubic feet only, as against 42 Admiralty measurement for coal).

The cost of the machinery, &c., necessary for the production of 100 tons daily will not exceed £700.

Experiments have for some time past been in progress at Woolwich with the view to render petroleum and other analogous oils available for use under steam-boilers. The patentee's attention being directed to this fact, he found that the company's fuel, being porous, would rapidly absorb these oils, 1 ton of fuel taking up 50 gallons. This absorption does not in any way affect the solidity of the blocks, and it is believed they are the best medium for the purpose yet discovered, and that the fuel oil bricks will be an immense advantage to ocean steamers and vessels of war, on account of the vast saving in stowage and their steam-producing powers. The Admiralty have just granted permission for an official trial of the company's fuel to be made at Woolwich.

The value of the company's patents to all coalowners must be at once apparent. It is also of especial value to ironmasters; and, where the slack is used for coking purposes, the process may be adopted to advantage in roughly amalgamating the coal into blocks before placing it in the ovens. These blocks require no previous drying, and produce more coke and of better quality.

The company will be happy to receive specimens of coal dust at their North Fleet Works, which will be manufactured and reported upon free of charge, and they will send a competent person to manufacture a small quantity of fuel at any colliery where the experiments may be desired.

For further particulars respecting license, terms, &c., apply to the company's representatives in their respective districts, or to the Managing Director, 26, Martin's-lane, Cannon-street, E.C., London.

By order,
26, Martin's-lane, E.C. EDWIN W. GLOVER, Secretary.

FRANCE AND BELGIUM.

BARKER'S FUEL PATENTS.

For all information apply by letter to HAMMOND and SON, No. 26, Cornhill, London.

CREASE'S NEW AND IMPROVED PATENT BORING MACHINE.—In consequence of the various and IMPORTANT IMPROVEMENTS that an experience of several years has enabled the inventor to introduce into these machines, he can with the most perfect confidence recommend them for their increased DURABILITY, SIMPLICITY, ECONOMY, and SPEED to be attained by their adoption in DRIVING LEVELS or DRIFTS.

The inventor has made arrangements to supply them in any quantity, with warrantry. Orders executed according to their date of priority.

Address, EDWARD B. CREASE, Tavistock, Devon.

IMMENSE SAVING OF LABOUR.

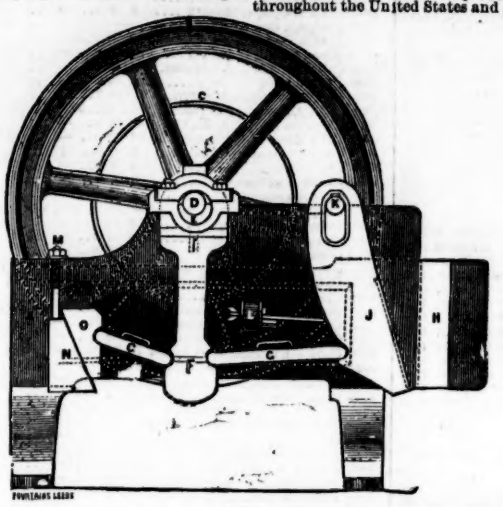
TO MINERS, IRONMASTERS, MANUFACTURING CHEMISTS, RAILWAY COMPANIES, EMERY AND FLINT GRINDERS, McADAM ROAD MAKERS, &c., &c.

BLAKE'S PATENT STONE BREAKER,

OR ORE CRUSHING MACHINE,

FOR REDUCING TO SMALL FRAGMENTS ROCKS, ORES, AND MINERALS OF EVERY KIND.

It is rapidly making its way to all parts of the globe, being now in profitable use in California, Washoe, Lake Superior, Australia, Cuba, Chili, Brazil, and throughout the United States and England. Read extracts of testimonials:—



The Parys Mines Company, Parys Mines, near Bangor, June 6.—We have had one of your stone breakers in use during the last twelve months, and Captain Morcom reports most favourably as to its capabilities of crushing the materials to the required size, and its great economy in doing away with manual labour.

For the Parys Mining Company, JAMES WILLIAMS.

H. R. Marsden, Esq.

Ecton Emery Works, Manchester.—We have used Blake's patent stone breaker made by you, for the last 12 months, crushing emery, &c., and it has given every satisfaction. Some time after starting the machine a piece of the moveable jaws about 20 lbs. weight, chilled cast-iron, broke off, and was crushed in the jaws of the machine to the size fixed for crushing the emery.

H. R. Marsden, Esq. THOS. GOLDSWORTHY & SONS.

Alkali Works, near Wednesbury.—I at first thought the outlay too much for so simple an article, but now think it money well spent. WILLIAM HUNT.

Welsh Gold Mining Company, Dolgelly.—The stone breaker does its work admirably, crushing the hardest stones and quartz. WM. DANIEL.

Our 15 by 7 in. machine has broken 4 tons of hard whinstone in 20 minutes, for fine road metal, free from dust. Messrs. ORD and MADDISON, Stone and Lime Merchants, Darlington.

Kirkless Hall, near Wigan.—Each of my machines breaks from 100 to 120 tons of limestone or ore per day (10 hours), at a saving of 4d. per ton. JOHN LANCASTER.

Ovoca, Ireland.—My crusher does its work most satisfactorily. It will break 10 tons of the hardest copper ore stone per hour. WM. G. ROBERTS.

General Frémont's Mines, California.—The 15 by 7 in. machine effects a saving of the labour of about 30 men, or $75 per day. The high estimation in which we hold your invention is shown by the fact that Mr. Park has just ordered third machine for this estate. SILAS WILLIAMS.

For circulars and testimonials, apply to—

H. R. MARSDEN, SOHO FOUNDRY,

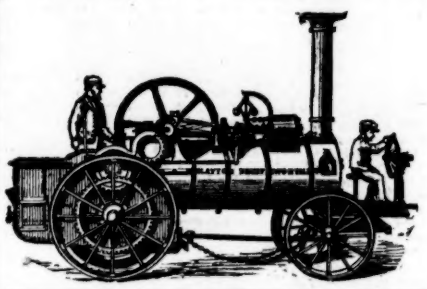
MEADOW LANE, LEEDS,

ONLY MAKER IN THE UNITED KINGDOM.

CLAYTON, SHUTTLEWORTH, AND CO.,

LINCOLN,

And 78, LOMBARD STREET, LONDON.



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PORTABLE AND STATIONARY STEAM ENGINES

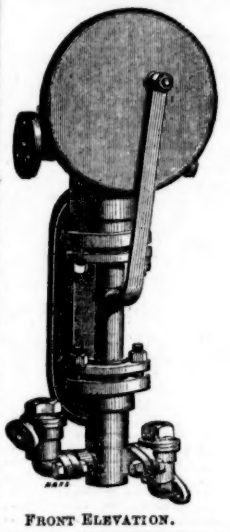
(from 4 to 40-horse power), Thrashing, Grinding, Pumping, Sawing Machinery, &c., will be forwarded free on application as above.

TRACTION ENGINES for COMMON ROADS, and for STEAM CULTIVATION

NOTE.—Nearly 8000 Engines and 6000 Thrashing Machines have been made by this firm within the last few years.

THE NEW PATENT INJECTOR,

FOR FEEDING BOILERS AND RAISING WATER FOR OTHER PURPOSES.



FRONT ELEVATION.

PRICES, DELIVERED IN LONDON:—

Size.	Ram. in.	Stroke. in.	Approx. horse-power boiler supplied.	Approximate gallons thrown per hour. At 100 rev.	150 rev.	200 rev. p. min.	Price.
No. 4	1½	3	15	115	172	230	£10 10
5	1⅞	3	22	180	270	360	12 12
6	1⅞	4	30	240	360	480	14 14
7	2¼	4	40	345	517	690	17 0
8	2¼	5½	55	475	712	950	19 10
9	2½	5½	75	585	877	1170	22 10
10	2½	6¾	90	720	1080	1440	25 10
11	2¾	6¾	110	870	1305	1740	28 10
12	2¾	8	120	1030	1545	2060	31 10
*14	3	8	230	2450	3675	—	40 0
*16	3¼	8	460	4900	7350	—	55 0

* The two last pumps are made double-acting.

Steam Regulator Valves, and also Check Valves, specially made to suit these Engines, can be supplied.

Terms: Nett Cash on Delivery.

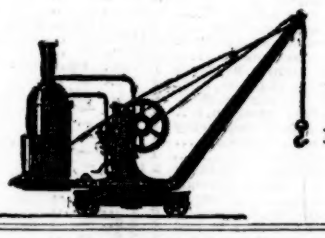
A CIRCULAR, WITH FULL EXPLANATION AND COMPARISONS, WILL BE SENT ON APPLICATION.

BROWN, WILSON, AND CO.,

No. 80, CANNON STREET, E.C.; AND VAUXHALL IRONWORKS, LONDON, S.

PARIS EXHIBITION, CLASS 52.

MEDAILLE D'HONNEUR.



APPLEBY BROTHERS,

EMERSON STREET, SOUTHWARK,
LONDON, S.E.,

Makers and Patentees of STEAM CRANES, DONKEY PUMPS, &c.,

From whom Prices and Particulars may be obtained.

COAL CUTTING MACHINERY.—The WEST ARDSLEY COMPANY having, by recently patented improvements, perfected their coal cutting machinery, worked by compressed air, are NOW READY to MAKE CONTRACTS for the CONSTRUCTION and USE of their MACHINES.

The results of twelve months' experience in the working of these machines, by the West Ardsley Company, have proved most satisfactory, their use being found to CHEAPEN the COST and IMPROVE the average SIZE of the COAL, to LIGHTEN the LABOUR, and also to MODIFY the SANITARY CONDITION of the MINE.

All communications to be made to Messrs. FIRTH, DONNISTHORPE, and BOWER, No. 8, Britannia-street, Leeds.

NOTICE.—The WEST ARDSLEY COMPANY, having reason to believe that their patents are being infringed upon, hereby give notice that they will TAKE LEGAL PROCEEDINGS AGAINST ALL PARTIES who may MAKE FOR SALE, or USE ANY MACHINERY in the construction of which any such INFRINGEMENT is MADE.

NITRO-GLYCERINE, OR NOBEL'S PATENT BLASTING OIL.—The EXPLOSIVE FORCE of this BLASTING OIL is TEN TIMES that of GUNPOWDER, and the ECONOMY and SAVING in TIME, LABOUR, and COST in removing granite and hard rock, in sinking shafts, driving tunnels, and opening forward in close ends is immense.

It will not explode from a spark or fire, but from concussion alone, and is consequently much less dangerous than gunpowder or gun-cotton.

Being heavier than water it sinks to the bottom of a wet hole, no other tamping than water being required.

One charge of this blasting oil, which is now being used with wonderful effect in all the largest slate quarries in North Wales, will displace as much slate rock as four or five charges of gunpowder; and its great force, acting on a large quantity of good slate rock, shakes and displaces it at the natural joints, or cracks, without damaging the slabs nearly so much as the more numerous blasts from any other blasting material would do.

This invaluable quarrying agent may now be obtained from Messrs. WEBB and Co., Carnarvon, sole consignees from the patentee.

THE CORNWALL BLASTING POWDER COMPANY,

ST. ALLEN GUNPOWDER MILLS, TRURO,

MANUFACTURERS OF PATENT BLASTING POWDER, ORDINARY GUNPOWDER, AND WATERPROOF SAFETY BLASTING CARTRIDGES.

THE CORNWALL BLASTING POWDER COMPANY SOLICIT PARTICULAR ATTENTION to their PATENT BLASTING POWDER, which has now been fully tested by time, and the growing estimation in which it is held by working men proves its great superiority over ordinary gunpowder.

It possesses the following advantages:—

Its WEIGHT being about TWENTY-FIVE PER CENT. LESS than ORDINARY GUNPOWDER, and EQUAL in STRENGTH, bulk for bulk, an IMPORTANT SAVING is EFFECTED on the score of CONSUMPTION.

It creates, on explosion, only about ONE-HALF as much SMOKE as ORDINARY GUNPOWDER, and this smoke being of a lighter nature soon passes away, and an IMPORTANT SAVING is thus EFFECTED on the score of TIME.

It is ADAPTED to ANY CLIMATE, DOES NOT BECOME WASTEFUL by EXPOSURE to the ATMOSPHERE, is NOT MORE DANGEROUS in use than ORDINARY GUNPOWDER.

Testimonials forwarded on application.

BASTIER'S CHAIN PUMP.—This patent pump is the MOST EFFICIENT in existence for LIFTING ANY QUANTITY of WATER from ANY DEPTH. One lifting from a depth of 170 ft. may be seen at work daily, on application to the

SOLE LICENSEES,

MESSRS. J. JACKSON AND CO., ENGINEERS, 17, GRACECHURCH STREET, LONDON, E.C.,

Who SUPPLY PUMPS and LICENCES.

Communications to Mr. Bastier, the patentee, to be sent to the same address.

AGENT FOR THE COUNTIES OF NORTHUMBERLAND AND DURHAM, YORKSHIRE, DERBYSHIRE, AND NORTH STAFFORDSHIRE,

MR. THOMAS GREENER, MINING OFFICE, NORTHGATE, DARLINGTON.

AGENTS FOR SCOTLAND.

MESSRS. P. and W. MACLELLAN, 127 and 129, TRONGATE, GLASGOW.

THE MINING SHARE LIST.

BRITISH DIVIDEND MINES.

Shares.	Mines.	Paid.	Last Pr.	Business.	Total divs.	Per share.	Last paid.
1500	Alderley Edge, c, Cheshire*	10 0 0	—				
200	Botallack, t, c, St. Just	91 5 0	180	170 180	8 12 8	0 5 0	Jan. 1867
4000	Brookwood, l	1 11 0	—		488 15 0	5 0 0	May 1866
1000	Bronfloyd, l, Cardigan*	12 0 0	—		0 5 0	0 2 6	Sept. 1866
6400	Cashwell, l, Cumberland*	2 10 0	—		8 7 0	0 6 0	Aug. 1866
916	Cargoll, s-l, Newlyn	15 5 7	14		0 1 6	0 1 6	Aug. 1866
1867	Cwm Erfin, l, Cardiganshire*	7 10 0	—		13 15 0	1 0 0	Feb. 1866
128	Cwmystwith, l, Cardiganshire	60 0 0	—		23 18 0	1 0 0	June 1867
280	Derwent Mines, s-l, Durham	300 0 0	—		379 10 0	3 0 0	April 1867
1024	Devon Gt. Consols, c, Tavistock†	1 0 0	—		174 10 0	5 0 0	June 1867
358	Dolcoath, c, t, Camborne	128 17 6	—	400 410	1067 0 0	7 0 0	July 1867
6144	East Caradon, c, St. Cleer†	2 14 6	—		828 10 0	3 0 0	June 1867
300	East Darren, l, Cardiganshire	32 0 0	5½	5 5½	14 11 6	0 2 0	July 1867
128	East Pool, t, c, Pool, Illogan	24 5 0	—		142 10 0	2 0 0	July 1867
5000	East Rosewarne, c, t, Gwinear	2 15 0	—		407 10 0	5 0 0	July 1867
1906	East Wheal Lovell, t, Wendron	3 9 0	—		0 10 6	0 1 6	Jan. 1866
2800	Foxdale, l, Isle of Man*	25 0 0	6½	6½ 7	2 15 0	0 7 6	April 1867
5000	Frank Mills, l, Christow	3 18 6	—		70 10 0	0 10 0	June 1867
5000	Great Laxey, l, Isle of Man*	4 0 0	18	15½ 16	3 5 6	0 5 0	Feb. 1866
5908	Great Wheal Vor, t, c, Helston†	40 0 0	17½	16 17	6 15 0	0 10 0	June 1867
1024	Herodsfoot, l, near Liskeard†	8 10 0	35		11 13 0	0 7 6	June 1867
6000	Hingston Down, c †	5 10 6	—		42 0 0	1 10 0	June 1867
400	Lisburne, l, Cardiganshire	18 15 0	—		0 10 0	0 5 0	April 1866
9000	Marke Valley, c, Caradon	4 10 6	—		492 10 0	3 0 0	May 1867
3000	Minera Boundary, l, Wrexham*	1 0 0	4⅞	4⅝ 4⅞	3 [illegible] 0	0 3 0	July 1867
1800	Minera Mining Co. l, Wrexham*	25 0 0	—		0 13 0	0 3 0	Mar. 1866
20000	Mining Co. of Ireland, c, l, cl.	7 0 0	—		412 13 0	4 0 0	May 1867
40000	Mwyndy Iron Ore*†	3 5 0	—		—	0 5 7	Jan. 1867
200	Parys Mines, c, Anglesey*	50 0 0	—		0 6 6	0 2 6	Mar. 1866
6000	Prosper United, t, c, St. Hilary	8 14 0	2¼		157 10 0	5 0 0	Jan. 1866
1120	Providence, t, Uny Lelant†	10 6 7	30	27 28	0 5 0	0 5 0	Feb. 1867
512	South Caradon, c, St. Cleer†	1 5 0	—		82 17 6	0 10 0	May 1867
6000	South Darren, l *	3 6 6	—		556 10 0	6 0 0	May 1867
508	Sumner Hill, Mold	3 13 6	—		0 5 6	0 2 6	June 1866
6000	Tincroft, c, t, Pool, Illogan†	9 0 0	—		0 10 0	0 5 0	July 1867
2000	Trumpet Cons., t, Helston	11 10 0	14	11¾ 12¼	18 11 0	0 5 0	Jan. 1867
3000	W. Chiverton, l, Perranzabuloe†	10 0 0	—		11 5 0	0 5 0	June 1867
400	West Wheal Seton, c, Camborne†	47 10 0	68	66 67½	19 7 6	2 0 0	May 1867
512	Wheal Basset, c, Illogan†	5 2 6	70	70 75	473 0 0	3 0 0	June 1867
1024	Wheal Friendship, c, Tavistock	20 0 0	—		623 0 0	1 0 0	June 1867
4295	Wheal Kitty, t, St. Agnes	5 4 6	—		300 10 0	0 10 0	Nov. 1866
1024	Wheal Mary Ann, l, Menheniot†	8 0 0	—		3 1 0	0 2 0	Feb. 1867
2000	Wheal Rose, c, Scorrier	—	—	14 15	61 15 0	0 15 0	June 1867
396	Wheal Seton, t, c, Camborne	58 10 0	115	110 115	1 0 0	0 10 0	Feb. 1866
1040	Wheal Trelawny, s-l, Liskeard†	5 17 0	9	8 9	244 5 0	2 10 0	June 1867
3000	Whitewell Lead, Clitheroe*	0 5 0	—		54 14 6	0 4 0	June 1867
17000	Wicklow, c, i, Wicklow	2 10 0	—		0 10 0	0 10 0	June 1867
					46 15 0	1 0 0	April, 1867

FOREIGN DIVIDEND MINES.

Shares.	Mines.	Paid.	Last Pr.	Business.	Total divs.	Per share.	Last paid.
15000	Cape Copper Mining*†	7 0 0	8	7 8			
100000	Don Pedro No. del Rey, Brazil*†‡	0 14 0	3¾		2 12 6	0 10 0	April 1866
25000	Fortuna, l, Spain*†	2 0 0	2½		0 4 3	0 1 6	June 1867
70000	English and Australian, c‡	2 10 0	—		1 5 4	0 2 0	Oct. 1867
20000	Gen. Mining Assoc., Nova Scotia†	20 0 0	18		1 13 0	0 1 0	Feb. 1867
10000	Gonnesa, l,* [5000 £5 pd., 5000 £4 pd.]	—	—		23 10 0	0 15 0	June 1867
15000	Linares, l, Spain*†	3 0 0	1½		10 per cent.		July 1867
50000	Panulcillo, c*†	3 0 0	2½		11 6 4	0 5 0	Jan. 1865
6000	Peel River Land and Mineral*†	—	—		10 per cent.		Yearly.
30000	Pestarena, g*†	2 10 0	3	2¾ 3	—	—	—
10000	Pontgibaud, s-l, France†	20 0 0	10½	9½ 10½	0 2 6	0 2 6	Mar. 1867
100000	Port Phillip, g, Clunes†	1 0 0	1⅛	⅞ 1⅛	4 14 3	0 11 0	June 1867
120000	Scottish Australian Mining Co.†	1 0 0	—	⅞ 1⅛	0 16 6	0 1 0	Jan. 1867
11000	St. John del Rey, Brazil*†	15 0 0	59	53 55	7½ per cent.		Mar. 1867
50000	Victoria (London) [25000 £1 pd., 25000 12s. 6d. pd.]				77 5 0	4 10 0	June 1867
40000	West Canada Mining Company*	1 0 0	—		0 9 0	0 1 0	Jan. 1866
					0 19 6	0 2 6	May 1866

NON-DIVIDEND FOREIGN MINES.

Shares.	Mines.	Paid.	Last Pr.	Bus. done.	Last Call.
35000	Alamillos, l, Spain*†	2 0 0	1¼		Fully pd.
100000	Anglo-Brazilian, g*†	0 10 0	1	¾ ⅝	Nov. 1866
12500	Anglo-Italian, g*†	0 5 0	—		May 1867
20000	Australian, c, South Australia†‡				
40000	Brittany Silver-Lead Mines, France* [15750 18s. pd.]	7 7 6	—		
2464	Burra Burra, c, South Australia‡	—	—		
25000	Capula, s, Mexico*†	5 0 0	—	30	
30000	Chontales, g, s, Nicaragua*†	1 12 0	—		
12000	Cobre Copper Company, c, Cuba†‡	4 0 0	4⅞	4¾ 5	Aug. 1866
10000	Copiapo Mining Company, Chili†‡	43 10 0	—		June 1867
10000	Copiapo Smelting, Chili*	16 10 0	—		May 1867
300	Copper Miners' Co. of South Australia* [150 £100 pd., 150 £70 pd.]	10 0 0	—		
25000	East del Rey, g, Brazil*†		—		April 1866
15000	El Chico Silver Mining and Reduction Company*	2 15 0	—		Nov. 1866
8000	English and Canadian Mining Company*	5 0 0	—		June 1866
40000	Fortune Copper Mining Co. of Western Australia	5 0 0	—		Nov. 1866
50000	Frontino and Bolivia, g, New Granada*†	2 0 0	—		Fully pd.
10000	Great Barrier Land, Mining, &c., New Zealand	1 15 0	½	⅜ ½	Fully pd.
80000	Great Northern, c, South Australia†	5 0 0	—		June 1867
68000	Kapunda Mining Co., Australia†‡	1 11 6	—		Fully pd.
7927	Lusitanian (Portugal)†‡	1 0 0	—		Sept. 1862
83090	Mariquita	3 0 0	—		
12500	Nerbudda Coal and Iron*† [6000 £5 pd., 6500 £4 pd.]	0 12 6	—		
51000	New Quebrada, c, Venezuela*†	—	—		Jan. 1867
50000	Nova Scotia Land and Gold*	3 10 0	—		Aug. 1865
15000	Otea, c, New Zealand*	1 15 0	—		
10178	Rhenish Consolidated, l [6000 £5 pd., 4178 £2 10s. pd.]	2 0 0	—		Sept. 1865
100000	Rossa Grande, g, Brazil*	—	—		Fully pd.
15000	San Pedro del Monte, s, Mexico*	0 10 0	—		May 1866
10000	San Roque, l, Spain	4 0 0	—	⅝ ½	June 1867
43174	United Mexican, s, Mexico†‡	5 0 0	—		Sept. 1866
10000	Vancouver, cl*†‡	28 5 0	2¼	1¾ 2	Fully pd.
6000	Val Sassam, s, c, l*†	6 0 0	—		
45000	Victor Emanuel, c, Italy*	7 0 0	—		
20000	Washoe, g†	1 0 0	—		Jan. 1867
80000	Worthing, c, South Australia*†	5 0 0	—		Fully pd.
75000	Yorke Peninsula, South Australia	1 0 0	—		Fully pd.
45000	Yudanamutana, c, S. A.*†‡	1 0 0	—		Fully pd.
		3 0 0	1	¾ 1	Fully pd.

BANKS AND FINANCIAL COMPANIES.

Shares.	Banks.	Paid.	Last Pr.	Bus. done.
40000	Alliance*†			
40000	Australian Mort. Land and Finance†	25 0 0	13½	13⅝
30000	Australasia†	5 0 0	—	
10000	Bank of Egypt†	40 0 0	63	63 65
50000	Bank of New Zealand†	25 0 0	—	
25000	Bank of Otago*†	10 0 0	18¼	17 19
20000	Bank of Victoria, Australia†	10 0 0	—	
20000	British North American†	25 0 0	—	
8915	Canada Company†	50 0 0	—	
50000	Canadian Loan and Investment*†	32 10 0	68	
44000	Chartered Bank India, Australia, and China†	2 10 0	—	
30000	Chartered Merc. of India, London and China†	20 0 0	19	
50000	City†	25 0 0	27	26 26½
20000	Colonial†	10 0 0	15	
40000	Company of African Merchants.*†	25 0 0	—	36¼ 36¾
150000	Consolidated Bank*†	3 0 0	3½	
50000	ditto New*†	4 0 0	—	4 4½
200000	Credit Foncier and Mobilier of England*†	4 0 0	—	
20000	East London*†	9 0 0	—	
30000	English, Scottish, & Aust., Chart.†	5 0 0	—	
20000	English and Swedish*†	20 0 0	—	
20000	Imperial Bank*†	25 0 0	—	
202500	Imperial Ottoman†	20 0 0	19	20
300000	International Land Credit*†	10 0 0	—	
50000	London Chartered Bank of Australia†	6 0 0	2¼	
37500	London and County†	20 0 0	23	22¼ 23
40000	London Financial Association*†	20 0 0	55	55 56
72000	London Joint-Stock†	30 0 0	7	
5000	London and River Plate*†	15 0 0	44	41 43
20000	ditto ditto New, issued at 1⅛ prem.*†	40 0 0	—	
20000	ditto ditto New*†	10 0 0	11⅛	11 11⅛
10000	London and South-Western*	10 0 0	—	
5000	London and Venezuela*†	20 0 0	—	
50000	London and Westminster†	12 10 0	—	
50000	Mercantile and Exchange*†	20 0 0	104	102 104
10000	Merchant*†	12 10 0	—	
5000	ditto New*†	25 0 0	—	
17156	Metropolitan and Provincial*†	20 0 0	—	
5000	Midland*†	20 0 0	—	7¼
20000	National of Australia†	20 0 0	—	
20000	National of Liverpool*†	4 0 0	—	
10000	National Provincial of England†	15 0 0	—	
55000	ditto ditto 2d and 3d issue†	42 0 0	—	
40000	National†	12 0 0	—	
50000	New South Wales†	30 0 0	—	
60000	Oriental Bank Corporation†	20 0 0	45	
27210	Provincial Banking Corporation*†	25 0 0	43	42 43
20000	Provincial of Ireland†	10 0 0	—	
10000	ditto ditto New†	25 0 0	87	85 87
40000	Union of Australia†	10 0 0	34	
10000	Union of Ireland*†	25 0 0	49	46 48
80000	Union of London†	22 0 0	—	
		15 0 0	39	39 40

PROGRESSIVE MINES.

Shares.	Mines.	Paid.	Last Pr.	Bus. done.	Last Call.
4000	Ballacorkish, I. of Man, l, c*	2 10 0	—		
3000	Bedford Unit., c, Tavistk.*	2 6 8	—		May 1867
1031	Bedol Aur, l, Holywell	1 12 0	—		
500	Billins, l, Flint	30 0 0	—		May 1867
1248	Boscaswell, t, c, St. Just	7 6 0	—		Fully pd.
2500	Bosworthen and Penzance	4 0 0	—		Dec. 1866
5000	Bottle Hill, t, Plympton	1 14 6	—		July 1867
1000	Blaendyffryn, s-l	5 0 0	—		June, 1866
200	Brynford Hall, l, Flint	28 0 0	—		
5000	Bryn Gwiog, l, Flint	0 18 0	—		Jan. 1866
1200	Bryn Gwyn, l, Mold*‡	9 0 0	—		June, 1864
1000	Budnick Consols, c, t	—	—		
5094	Bwlch Consols, s-l	4 0 0	—		
6000	Bwadrain Consols, s-l	3 0 0	—		
30000	Caldbeck Fells, l, Cumber.*	1 10 0	—		
1000	Camborne Consols, c	18 10 0	—		Dec. 1866
4600	Camborne Vn.&Wh.Frn., c	11 14 7	—		Feb. 1864
11000	Cape Cornwall, t, c* [8000 £2 10s. pd., 3000 10s. pd.]				July 1867
914	Caradon Cons., c, St. Cleer	32 3 6	—		Oct. 1866
1000	Carn Brea, c, t, Illogan‡	28 0 0	—	12 14	Feb. 1867
6000	Carn Camborne, c, Cambn.	2 2 0	1⅛	18s. 20s.	May 1867
5000	Carnarvonshire, l*	4 0 0	—		July 1867
4005	Cardigan Cons.*	5 0 0	—		Fully pd.
600	Cardiganshire, l*	17 10 0	—		Fully pd.
20000	Carysfort [3200 £2½ pd., 16800 £1⅜ pd.]		⅜		Sept. 1866
2500	Cefn Cilcen, l, Flint*	2 18 0	—		Mar. 1865
2500	Central Minera, l*	3 12 6	—		Aug. 1866
16000	Central Snailbeach l*	1 0 0	—		Nov. 1866
3000	Chiverton, l, Perranzabu.	9 7 6	7¼	7 7¼	Fully pd.
3000	Chiverton Moor, l, Perranz.	6 6 0	5⅛	5¼ 5½	May 1867
4000	Clara, Llywernog	2 16 6	—		May 1867
2880	Clifford Amalg., c, Gwen.‡	33 17 6	7⅝	7 7¼	May 1867
256	Condurrow, c, t, Camborne‡	76 10 0	—		June 1867
50000	Connorree, c, sul, Wicklow*	1 0 0	—		
2450	Cook's Kitchen, c, Illogan‡	19 14 9	—	9 10	Fully pd.
1024	Copper Hill, c, Redruth‡	12 10 0	—		July, 1866
6885	Cornish Clay and Tin	1 0 0	—		June, 1866
1055	Craddock Moor, c, St. Cleer‡	12 6 0	—		Fully pd.
861	Crane, c, Camborne	33 9 6	—		May 1867
12000	Crelake, c, Tavistock	3 12 0	1		Dec. 1866
6000	Cuddra, t, St. Austell	5 0 0	—		June 1867
35000	Dale, l, North Stafford	1 0 0	—		Oct. 1866
4000	Devon Wheal Frances, c	1 5 9	—		Fully pd.
1024	Dev. Wh. Lopes, Bickleigh.	18 10 0	—		Mar. 1867
12800	Drake Walls, t, Calstock‡	2 5 0	11s.		Mar. 1867
656	Ding Dong, t, Gulval‡	49 14 6	—		Dec. 1866
25000	Dundalk, Ireland, l*	0 15 0	—		Dec. 1866
3000	Dyfngwm, l, Wales	13 7 0	—		Feb. 1867
740	Eaglebrook, l*	19 15 0	—		June, 1866
512	East Basset, c, Redruth†‡	29 10 0	20	15 17	July, 1866
1000	East Basset and Grylls, t	3 5 0	—		
6000	E. Bottle Hill, t, Plympton	0 9 6	—		July, 1865
4096	East Brookwood, Holne	2 8 8	—		May 1867
6000	E. Carn Brea, c, Redruth‡	3 15 0	2¼	2 2¼	July, 1866
4000	East Chiverton, l, Perranz.	2 11 9	1⅝	1⅜ 1⅝	
6000	E. Grenville, c, Camborne	3 6 6	—	1¼ 2	Mar. 1867
4000	E. Gunnislake & S. Bed. c.	10 7 0	—		Feb. 1867
6000	East Laxey, l, Isle of Man.	2 15 0	—		June 1867
6000	East Neptune, c, Marazion.	—	—	2¾ 3	Dec. 1866
3986	E. Providence, t, Uny Lel.	5 1 9	—		
6000	East Snaefell, l, I. of Man*	2 0 0	—		Feb. 1867
5610	East Seton, c, Camborne	0 13 6	—		Dec. 1864
9000	E. St. Just, t* [6000 £3 10s. pd., 3000 £1 10s. pd.]				May 1867
256	East Tolgus, c, Redruth	96 0 0	—		Nov. 1866
1190	E. Wh. Agar, c, St. Cleer	12 17 0	—		April, 1866
5000	E. Wh. Rose Con., l, Per.*	2 0 0	—		Jan. 1865
4000	E. Wh. Russell, Tavistock†	12 5 6	1¾	1¼ 1¾	July 1867
6000	Fortescue Consols, c	0 12 6	—		
940	Fowey Con., c, Tywardreath‡	5 4 6	—		Feb. 1867
6000	Furze Hill Wood Con. Buckl.	1 16 0	—		Feb. 1866
10000	Fursdon, c* [5000 £1 10s.]	—	—		Mar. 1865
4096	Garlidna Unit., t, Wendron	5 7 7	—		Feb. 1866
4000	Gawton, c, Tavistock	3 10 6	—		May 1867
6000	Gen. Min. Co. for Ireland, c	5 10 0	—		
40000	Glasgow Caradon c* [30000 £1 pd., 10000 10. pd.]				Sept. 1866
5700	Goginan, l	12 10 0	—		April 1864
6144	Gonamena, c, St. Cleer	6 1 0	—		June 1867
6000	Gothic, s-l, Cardigan*	2 10 0	5		Fully pd.
486	Grambler and St. Aubyn†‡	71 0 0	—		Mar. 1867
10000	Great Cwmsymlog, s-l*	1 0 0	—		May, 1867
4096	Great Caradon, c, St. Ive.	3 13 0	—	⅜ ⅝	Feb. 1867
3000	Great Chiverton, s-l*	1 0 0	—		May, 1867
3000	Gt. East Lovell, t, Helston	2 1 0	—		Nov. 1866
5000	Great Mona, l, Isle of Man*	4 0 0	—		June, 1867
5000	Great North Downs, c	6 13 0	3¾	3¼ 3⅛	Feb. 1867
12500	Gt. No. Laxey (Isle of Man)*	0 12 6	—		Jan. 1867
4800	Great Retallack, s-l, b	2 4 0	5	4¼ 4¾	July 1867
6000	Great South Chiverton, s-l.	1 5 0	—		May 1867
6000	Gt. So. Tolgus, c, Redruth.	1 4 0	—		June 1867
3313	Great Wheal Baddern, t	7 17 6	—		June, 1863
1798	Gt. Wh. Fortune, t, Breage	29 5 6	—		July 1867
119	Great Work, t, Germoe	100 0 0	—		
10240	Gunnislake (Clitters'), t, c.	4 19 0	—		April 1867
6068	Gwydyr Park, l, Llanrwst.	1 13 6	—		June 1867
6000	Hallenbeagle, c, Kenwyn.	2 17 0	—		April 1867
6400	Harwood, l, Durham*	0 6 0	—		Sept. 1864
5000	Havan, l, Cardigan*	4 15 0	—		Mar. 1866
6000	Lady Bertha, c, Tavistock.	4 4 0	—		May 1867
1019	Leeds and St. Aubyn, t, c.	19 13 4	—		Mar. 1866
160	Levant, c, t, St. Just	10 8 1	—		June, 1866
1024	Lovell Consols, t	—			
3000	Maes-y-Safn, l*	20 0 0	—		Jan. 1866
6000	Maudlin, c, Lostwithiel	4 7 0	—		May, 1865
640	Mount Pleasant, l, Mold	4 0 0	—		
1024	Nangiles, t, c, Kea	27 5 0	15	13 15	Feb. 1867
12800	Nether Hearth* [6400 £1 pd., 6400 2s. pd.]				
6000	New Birch Tor & Vitifer, t‡	1 13 6	—		Oct. 186
6000	New Clifford, c, Gwennap*	2 10 0	—		May 1867
24000	New Cornish [12000 £1 pd., 12000 15s. pd.]				Sept. 1866
6400	N. Crow Hill, l, St. Stephen	3 3 0	—		June 1867
6514	New E. Russell, c, Tavistk.	0 11 6	—		April, 1867
400	New Hendra, t, c, Breage.	14 11 0	—		Mar. 1866
6400	New Pembroke, t, c	1 4 6	—		July 1867
5755	New Treleigh, c, Redruth	4 8 0	—		May, 1866
960	New Trevenen, t, Wendron	8 14 0	—		May, 1866
3729	New Wheal Lovell, t	1 15 0	—		May 1867
400	New Wh. Seton, c, Cambn.	56 5 0	—		April 1867
2000	New Wheal Towan, c, t	1 10 0	—		July, 1866
16000	North Devon, s-l*	0 17 0	—		July, 1867
5000	No. Dolcoath, c, Camborne.	4 3 0	—		Mar. 1867
3457	North Downs, c, Redruth	4 16 4	—		June 1867
1361	No. Grambler, c, Redruth	6 19 9	—		Dec. 1866
16000	N. Hallenbeagle [8000 £1 pd., 8000 8s. 6d. pd.]				July, 1865
6000	North Jane, t, s-l, Kenwyn.	3 1 6	—		Mar. 1867
2000	North Levant, t, c, St. Just	10 12 0	—		April, 1867
20000	Nth. Minera, l, Wrexham*	1 0 0	—		Fully pd.
4000	N. Phœnix, c, Linkinhorne	4 2 6	—		May, 1867
3933	North Pool, c, Illogan	5 16 0	—		Mar. 1867
1024	North Retallack Mine	2 0 0	—	4 4½	Feb. 1867
695	No. Roskear, c, Camborne.	52 14 0	—		July 1867
1935	North Shepherds, l*	6 10 0	—		May, 1867
5936	No. Treskerby, c, St. Agnes	1 9 0	1⅛	⅞ 1	
6000	North Wheal Basset, c, t†	5 0 0	—		April, 1866
5610	North Wheal Crofty, c†	3 11 3	3½	3⅛ 3⅜	July 1866
3000	North Wh. Chiverton, l.	4 0 0	—		Mar. 1867
6144	N. Wh. Robert, Smp. Spiney	4 8 11	—		Mar. 1867
12288	Okel Tor, c, Calstock	2 7 4	—		Aug. 1866
8000	Okehampton	1 10 0	—		
8000	Old Gunnislake, c, Calstock	2 15 0	—		Mar. 1867
5000	Old Westminster, Denbigh*	2 0 0	2⅛	2 2⅛	June 1867
6400	Par Consols, c, St. Blazey†‡	2 12 0	—		July 1867
8465	Pedn-an-drea, t, Redruth	6 2 6	—		May 1867
5000	Pendeen Consols, c, St. Just	6 3 0	—		May 1867
3340	Penhale Wheal Vor, t, c	3 12 6	—		July 1867
5000	Penhalls, t, St. Agnes	3 0 0	—		May, 1866
1772	Polberro, t, St. Agnes	15 0 0	—		Fully pd.
512	Polbreen, t, St. Agnes	8 0 0	—		Aug. 1860
10000	Prince Arthur Consols, l*	2 0 0	—		Fully pd
12800	Prince of Wales, t, Calstock	0 12 6	61s.	56s. 58s.	Feb. 1867
12000	Redmoor, c, t, Callington	1 11 6	—		Feb. 1867
6000	Reinnie Laxey, l, I. of Man*	4 0 0	—		Feb. 1867
1024	Rose and Chiverton Un., l	5 0 0	6	5½ 6	Nov. 1866
2000	Rosecliff and Tolcarne, l*	9 0 0	—		April 1867
3973	Rosewarne Consols, c	5 2 6	—		Feb. 1866
5915	Rosewall Hill & Ransom, c	3 0 0	—		Aug. 1866
3848	Rosewarne United, c, t	4 3 0	—		June 1867
20500	Snaefell, l, Isle of Man*	1 0 0	—		Fully pd.
400	Silver Brook, s-l, Carmar.*	10 0 0	—		July, 1866
4096	Sithney Wheal Metal, t	4 5 6	—		Oct. 1866
12000	Sortridge Cons., c, Tavist.†	1 14 6	—		Oct. 1866
512	South Basset, c, Gwennap.	25 10 0	—		June 1867
1024	South Callington, s-l	5 17 6	2½	2 2½	Jan. 1867
3000	So. Chiverton, s, l, Perran.	5 15 0	—		June, 1866
6138	So. Condurrow, t, c, Camb.	3 15 6	¾	11s. 13s.	May 1867
2283	South Crenver, c, Crowan	12 9 0	—		Oct. 1865

Shares.	Mines.	Paid.	Last Pr.	Bus. done.	Last Call.
1024	South Devon, c & l	3 0 0	—		
6000	S. Dolcoath & Carnarth. Con.	2 16 6	—		
5000	So. Exmouth, l. Christow	2 17 0	—		
6000	So. Fowey, c, Tywardreath	0 10 0	—		Aug.
1024	So. Herodsfoot, l, Liskeard	10 0 0	—		Feb.
30210	South of Scotland, c*	0 17 6	—		April
3000	South Trevenna, c, t	2 0 0	—		April
937	So. Wh. Crofty, c, Illogan.	24 10 10	—		Sept.
496	So. Wh. Frances, c, Illog.†‡	18 18 9	32½	28 30	Dec.
6000	South Wheal Grenville, t, c	0 18 0	—		Feb.
400	So. Wh. Seton, c, Camborne	78 13 0	—		
512	South Tolgus, c, Redruth	9 10 0	—		Feb.
64	Spearne Consols, t, St. Just	13 2 6	—		July
280	Spearne Moor, t, St. Just	6 2 0	—		Aug.
940	St. Ives Consols, t, St. Ives‡	10 15 0	—		May
673	St. Ives Wheal Allen, t	18 10 1	—		Dec.
9000	St. Just Cons. t [6000 £1 pd., 3000 10s. pd.]				Nov.
7000	Stiperstones, l, Salop*	5 0 0	—		Nov.
920	Stray Park, c, t, Camborne†‡	43 6 8	—		Sept.
3500	Tin Hill, t, St. Austell	1 8 0	—		Mar.
6000	Tolcarne, c, Camborne	3 1 6	—		July
548	Trelyon Consols, t, St. Ives.	16 0 0	—		Jan.
501	Tresavean and Trethurrup	16 11 0	—		July,
4440	Trevenen & Tremenheere	7 11 0	—		Dec.
4096	Treweatha, s-l, Menheniot.	7 17 0	—		July
1943	Treworlis, t, Wendron	11 15 4	—		June
6400	Tyne Head, t, c*	0 18 0	—		Mar.
4200	Vigra and Clogau, c, Dolg.*‡	5 0 0	—		Feb.
2500	West Briton, c, Crowan	1 0 0	—		Jan.
6000	West Basset, c, Illogan†‡	1 15 0	—		Fully
1024	West Caradon, c†‡	17 0 0	—		
1319	West Cwm Erfin, l* [319 £4 raid]		—		Mar.
2850	W. Condurrow, t, c, Cam.	12 11 3	—		July
256	West Damsel, c, Gwennap.	38 10 0	—		April
12800	West Drake Walls, c	0 2 6	⅜		Aug.
2592	West Great Work, t*	5 11 0	—	1¾ 2¼	
5000	West Godolphin, t, c	—	—	4 4½	Mar.
12000	W. Maria & Fortes., c, Lam.	3 10 0	—		June,
6000	Westminster, l*	5 0 0	—		
12800	West Prince of Wales, c	1 0 0	¾		June
1000	West Rose Down, c, Linkin.	19 5 0	—		Fully
6000	West St. Ives, t, c	0 1 0	—		
512	West Tolgus, c, Redruth	54 10 0	—	¼ ⅜	July
512	W. Wh. Frances, t, Illogan	105 15 0	—		Oct.
5000	W. Wh. Kitty, t, St. Agnes.	2 17 6	1	½ ¾	July
6000	Wheal Agar, c, Illogan	7 8 6	—		May
6000	Wheal Alice Alfred, t, c	2 0 0	—		May
1000	Wheal Basset and Grylls, t	7 18 6	—		July
512	Wheal Buller, Redruth†‡	21 10 0	25	20 22½	Feb.
6000	Wheal Crebor, c, Tavistock	2 2 6	—		Aug.
6144	Wh. Damsel, c, t, Gwennap	2 15 0	—	¼ ⅝	Mar.
849	Wheal Emily Henrietta, c.	18 5 0	—		May
4000	Wh. Emma, c, Buckfastlei.	3 19 0	—		July
6000	Wheal Grenville, c, Camb.†	9 18 0	1	¾ 1	July
6000	Wheal Ida, s-l, St. Ive	1 0 0	—	1¼ 1½	July
1024	Wh. Kitty, t, Uny Lelant†.	3 10 6	—		June
512	Wheal Jane, s-l, Kea	10 10 0	—		Sept.
896	Wh. Margaret, t, Uny Le.‡	13 17 6	—		
728	Wheal Margery, t, c	25 4 10	—		Sept.
100	Wheal Mary, t, Lelant‡	36 2 6	—		
6000	Wheal Mary Florence, c*	1 19 0	—		May
1000	Wh. Mary Hutchins, c, Plym.	2 0 6	—		
6000	Wh. Norris, t, c, St. Cleer	4 6 1	—		Feb.
80	Wheal Owles, t, St. Just‡	70 0 0	—		June
6000	Wheal Sparnon, c, Redruth	3 6 0	—		Sept.
1920	Wh. Trannack, c, Sithney.	1 13 3	—		
1200	Wheal Trevenna, t, c*	9 10 0	—		May
4096	Wheal Uny, t, c, Redruth	10 9 6	—		Jan.
					April
					July

MISCELLANEOUS.

Shares.	Companies.	Paid.	Last Pr.	Bus. done.
60000	Anglo-American Telegr.*†	10 0 0	18⅝	17¾ 18
20000	Anglo-Mexican Mint†	10 0 0	15	
600000	Atlantic Telegraph*†	100 0 0	45	28 33
600000	ditto 8 per cent.*†	100 0 0	87	75 78
20000	Australian Agricultural†	20 10 0	19	17
47000	Berlin Waterworks*†	10 0 0	13¼	12¼ 13
13000	ditto New*†	4 0 0	—	5¼ 5¾
25000	Bolckow, Vaughan*†	25 0 0	—	
40000	Bombay Gas*†	5 0 0	4¾	4 4½
10000	ditto New*†	3 0 0	2¾	2 2½
6000	British American Land†	44 0 0	—	18 23
534780	Brit. & Irish Mag. Teleg.*†	100 0 0	—	90 95
25000	Ceylon Company*†	10 0 0	9½	8½ 9
12000	ditto A shares*†	5 0 0	4	
27000	China Stm.-ship & Lab. Coal†	11 0 0	—	
30000	City Discount*†	3 0 0	—	
20000	City London Real Prop.*†	8 0 0	—	1¼
35000	City of Moscow Gas*†	25 0 0	—	5 5½
15041	City of Milan Improv.*†	17 10 0	—	
4959	ditto ditto *‡	30 0 0	—	9 11
20000	City Offices*†	25 0 0	—	
30000	Colonial*‡	15 0 0	12	
10000	ditto*†	22 10 0	—	
50000	Commercial Uni. (Insu.)†	5 0 0	4¼	3¾ 4¼
17500	Continental Union Gas*†	15 0 0	—	
2500	ditto ditto *†	20 0 0	—	
42000	Copper Miners of Eng.† [2000 £25 pd., 40000 £100 pd.]			
10000	Cred. Fonc. of Mauritius*†	10 0 0	—	5¼ 6¼
1002925	Crystal Palace†	100 0 0	26	24 26
160820	ditto preference†	100 0 0	—	96¼ 101½
277000	ditto 6 per cent. p.d.†	100 0 0	105	103 106
7500	Darjeeling*†	17 0 0	—	
20000	E. Indian Land, Credit*†	10 0 0	—	3¼ 4¼
5000	E. India Irriga. & Canal†	16 10 0	—	12½ 13½
80000	Ebbw Vale Iron Co.*†	27 10 0	—	
113813	Egyptian Com. & Tradg.*†	7 0 0	—	1¾ 2
879975	Electric Telegraph †	100 0 0	147	142 147
20000	English and For. Credit*†	7 10 0	—	
25000	Fairbairn Engineering*†	5 0 0	—	4 5
30000	Fore-street Warehouse*†	12 0 0	13¼	12¾ 13
200000	General Credit and Disc.*†	7 10 0	—	5½ 5⅝
20000	General Stm. Navigation†	14 0 0	28	26 28
4000	Hollybush Col. and Coke*	5 0 0	—	
100000	Hudson's Bay†	20 0 0	—	14⅞ 15⅛
80000	Im. Land Co. Marsailles*†	11 10 0	—	
150000	International Financial*†	5 0 0	3	2⅞
50000	Italian Irrigation*†	20 0 0	—	2 4
1000000	ditto 6 per cent.*†	100 0 0	47	30 35
30000	Italian Land†	5 0 0	—	
20000	Land Securities*†	5 0 0	2	
4000	London African Tradg.*†	10 0 0	—	3 5
20000	Lon. & Caledon. Marine*†	5 0 0	—	
50000	London County & Build.*†	2 0 0	—	
12000	London Dist. Telegraph*†	5 0 0	1⅛	1 1¼
148525	London Gen. Omnibus *†	4 0 0	3	2¾ 3
5000	London and Glas. Engi.*†	25 0 0	—	
64500	London & Prov. Marine*†	2 0 0	2	
50000	Madras Irrigation*†	100 0 0	120	100 102
10000	Marine Investment*†	6 5 0	—	
12500	Mauritius Land, Cred., &c.*†	2 0 0	—	
12000	Mediterranean Ex. Tel. *†	10 0 0	2⅛	2 2¼
9280	Merchant Shipping*†	50 0 0	42	30 40
40000	Millwall Ironworks*†	7 10 0	—	
500000	Millwall Freehold Land*†	100 0 0	—	40 45
30000	Mineral Rights Assoc.*	1 0 0	—	
36500	Natal Land and Col.*†	5 10 0	—	
120000	National Discount*†	5 0 0	—	11¾ 12
40000	ditto new, issued at 5 pm.†	5 0 0	11¾	6½ 7
20000	National Provin. Marine*†	2 10 0	—	
20000	National Steam Naviga.*†	30 0 0	14	
25000	New Consolidated Disct.*†	3 0 0	—	2¼ 2¾
20000	New Zealand Loan, &c. *†	2 10 0	2¾	
20000	New Zealand Trust, &c.*†	5 0 0	—	5¾ 6
40000	N. British & Merc. Insur.†	6 5 0	16	
15000	Northern Assam Tea*†	3 10 0	—	
25000	ditto B*†	9 0 0	—	
30000	Oriental Gas*†	5 0 0	5¾	5¼ 5¾
30000	ditto New*†	1 0 0	1⅝	1⅛ 1⅝
25000	Otago and Southland*†	2 0 0	—	
20000	Peninsular and Oriental*†	50 0 0	45	46 49
20000	ditto ditto New*†	50 0 0	45	48½ 49½
100	Picksley, Simms and Co.	7 0 0	—	
10000	Rhymney Iron*†	50 0 0	26	24 26
10000	ditto New*†	50 0 0	7	7 8
15000	Royal Mail Steam*†	60 0 0	92	87 89
300000	Scottish Austra. Invest.*†	100 0 0	125	118 123
14200	South Australian Land*†	25 0 0	37	35 37
280000	Submarine Telegraph*†	100 0 0	—	65 75
—	ditto Scrip*†	1 0 0	—	⅝ ⅞
100000	Thames & Mersey Marine*†	2 0 0	5½	
30000	Uni. Kingdom Telegraph*†	5 0 0	—	1⅛ 1⅜
20000	ditto 10 per cent. pref.*†	5 0 0	—	

b, blende; *cl*, coal; *c*, copper; *g*, gold; *l*, lead; *s*, silver; *sl.*, slate; *s-l*, silver-lead; *t*, tin; *z*, zinc.

*** Companies marked thus * have been incorporated with Limited Liability; those marked † have been admitted on the Stock Exch[…] those marked thus ‡ have paid Dividends.

*** Our object being to make the Share List correct, we earnestly call upon those who have the power to aid us, by forwarding any co[…] tions or correction which may, from time to time, come under their notice. To shareholders, as well as those officially connected [...] the mines, we appeal for information. Reports from mines—in fact, mining intelligence of every description, forwarded to our o[…] will meet with ready attention.

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